Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

November 23, 1959

RECEIVED
NOV 23 1959
THE CHEMISTS' CLUB LIBRARY

Baker

CARBON DISULFIDE

TECHNICAL

J.T.Baker CHEMICAL

J. T. BAKER CHEMICAL CO.
PHILLIPSBURG, N. J.
New York • Chicago • Philadelphia • Los Angeles

PENNSALT

AMMONIA, CHLORINE and FERRIC CHLORIDE

AMMONIA
Anhydrous;
Aqueous, 30%

CHLORINE
In cylinders, ton containers, tank cars

FERRIC CHLORIDE
Anhydrous, liquid

For additional information, write to Dept. O:

INDUSTRIAL DIVISION
PENNSALT CHEMICALS CORPORATION
3 Penn Center • Philadelphia 2, Pa.

Pennsalt Chemicals
ESTABLISHED 1850

CARBIDE'S

PRIMARY AMYL ACETATE

Immediate shipment in tank cars — compartment tank cars — tank trucks — compartment tank trucks — 55 gallon drums in LCL, truckload, or carload lots — from our plants, bulk storage facilities, and warehouses across the nation.

UNION CARBIDE CHEMICALS COMPANY

UNION CARBIDE

30 EAST 42nd STREET NEW YORK 17, N. Y.

You can always rely on

DU PONT ADIPIC ACID

for high purity and uniformity

This organic dibasic acid has many applications in plastics, rubber, petroleum, chemical and allied fields. Minimum purity of dependable Du Pont Adipic Acid is 99.6%. Packaged in 50-lb., multi-ply paper bags, and new 2,000-lb. "Pillar-Pac" fiberboard containers.

You can rely on prompt shipment from stock points strategically located throughout the country. To order high purity Du Pont Adipic Acid or to obtain information, call or write:

DU PONT
REG. U.S. PAT. OFF.

INDUSTRIAL & BIOCHEMICALS DEPARTMENT
E. I. du Pont de Nemours & Co. (Inc.), Wilmington 98, Delaware

BETTER THINGS FOR BETTER LIVING . . . *THROUGH CHEMISTRY*

HIGH QUALITY

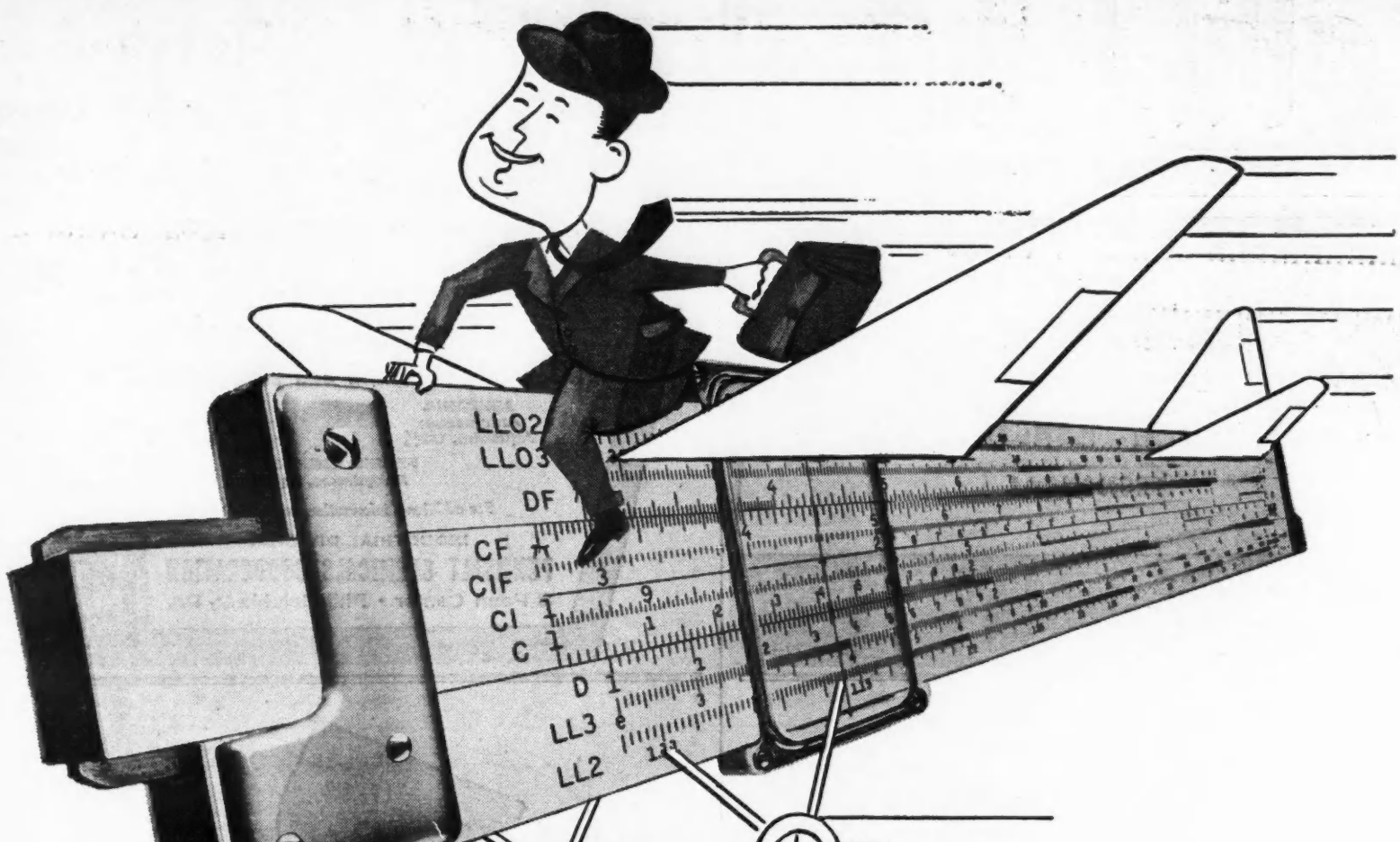
SODIUM SULPHATE

PRIOR CHEMICAL CORPORATION
420 LEXINGTON AVENUE
NEW YORK
CABLE: PRIORCHEM NEW YORK
PHONE: LExington 2-9811

borax

U.S. BORAX & CHEMICAL CORPORATION

LOS ANGELES • NEW YORK • CHICAGO • ST. LOUIS • ATLANTA • PHILADELPHIA • CLEVELAND



ALKALI USERS

GET SPECIALIZED HELP

fast and first hand...from WESTVACO®

CAUSTIC SODA
Liquid 73%;
Liquid 50%, Regular and Low-Chloride Grades;
Flake, Solid and Ground.

CAUSTIC POTASH
45% and 50% Liquid;
Flake.

SODA ASH
Light, Intermediate and Dense Grades.

"Coming in on a wing and a slide-rule" is no exaggeration.

With our plants and laboratories just hours away by plane, our customers frequently rely on us for experienced assistance when out-of-the-routine problems arise. Westvaco production and process engineers . . . materials handling experts . . . specialists in textiles, paper or glass-making . . . whatever help the situation demands are in the customer's plant in short order when they are needed.

Many questions, of course, can be handled satisfactorily by phone or mail and these get fast handling, too.

All phases of technical service continue to be expanded . . . a growing service you enjoy at no added cost when you deal with Westvaco.

fmc
FOOD MACHINERY AND CHEMICAL CORPORATION ®

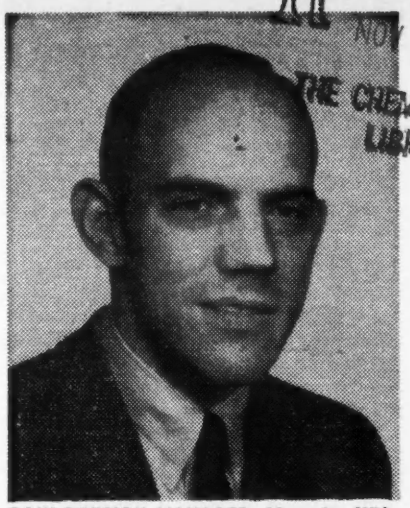
Putting Ideas to Work

FOOD MACHINERY AND CHEMICAL CORPORATION
Westvaco Chlor-Alkali Division
General Sales Offices:
161 E. 42nd STREET, NEW YORK 17

RECEIVED
NOV 23 19
THE CHEMISTS' CLUB
LIBRARY

Oil, Paint and Drug Reporter

Vol. 176 No. 22 30 Church St., New York 7, N.Y. November 23, 1959



DOW DIVISION MANAGER: Macauley Whiting, named general manager of its Midland Division by Dow Chemical Company, Midland, Mich. Mr. Whiting succeeds the late Dr. William H. Schuette, who died unexpectedly November 8th.

Cranberries Only the Appetizer; Now Washington Wants to Probe All Foods-for-Additives Taints

With the recent cranberry scare providing the impetus, the government is getting ready to take a new, long look into additives affecting the nation's food supplies to determine whether changes are needed in existing control laws. Arthur S. Flemming, the Secretary of Health, Education & Welfare who started the whole thing with the cranberries, says he would "concur with the observation" that a re-examination of the laws is now needed. The secretary adds that in light of the events that have occurred recently "I certainly feel the need to look further into the law, and I will have no hesitancy to make that recommendation."

Flemming Opens Pandora's Box

The secretary's feelings on this point, plus his earlier decision to support the Delaney carcinogen clause of the food additives legislation, both in the letter and spirit of the law, appeared certain to open a Pandora's box of new problems for chemicals additives producers, food processors and drug manufacturers.

As cranberry pickers continued to yell "foul" at the secretary for his blast at the 1958 and '59 cranberry crops and as scientists went through the tedious task of checking representative lots for contamination by the pesticide chemical aminotriazole, some of the questions popping up in industry circles last week were:

- How firm is the present policy of Food & Drug Administration to permit the continued use of diethylstilbestrol, a known carcinogen, in animal feeds because of prior approvals under the "new drug" law? Is this policy now subject to review?
- Will the Department of Agriculture be forced to take a new look at its policy of accepting for registration pesticides capable of producing cancer and approving their use on food or feed crops?
- Are existing requirements relative to the labeling of chemical pesticides adequate to insure the degree of self-policing

—Continued on page 36

Styrene: Is Monsanto Yearning to Be King?

Does Monsanto Chemical Company have a hankering to become the kingpin of styrene? That's what the trade would like to know in the wake of last week's disclosure by Monsanto that it intends to boost its monomer capacity by at least 200 million pounds a year.

This hefty expansion will take place in two stages somewhere in Texas. Just exactly where has not yet been decided. It may be at Monsanto's 360-million-pound plant in Texas City, where a 40-million-pound expansion was completed just this January. Or, then, it may be somewhere else in the Lone Star State.

Some 100 million pounds of the new capacity is expected to be on stream by the first quarter of 1961. The other 100 million pounds is due early in '62.

Monsanto vs. Dow Chemical

Thus, within two years, Monsanto should have a styrene monomer capacity of around 560 million pounds a year. Dow Chemical Company, today's generally acknowledged styrene king, splits up an estimated 500 million pounds of annual monomer capacity between plants in Freeport, Tex., and Midland, Mich.

Does Dow mean to hold its lead? For those who would like to know, the Midland company has this cryptic answer: "Our plans on expansion are not yet firm."

That styrene can stand a 200-million-pound capacity boost is generally conceded in the industry. Production of the monomer topped 900 million pounds in the first eight months of this year—160 million pounds over the comparable period in 1958.

Industry capacity today is figured at around 1.47 billion pounds, broken down as follows:

	Million lbs./yr.
Dow	500
Monsanto	360
Koppers	200
Shell Chemical	135
Foster-Grant	105
Union Carbide	100
Odessa Styrene	50
Cosden	20

The way styrene has been going this

—Continued on page 38

Caustic Soda Terminal Is Established in Denver

Dow Chemical Company has established a terminal for 50 percent caustic soda solution in Denver, Col. Located at the site of the Rocky Mountain Arsenal, the terminal has been designed to serve industries on the eastern slope of Colorado, in Wyoming and in western Nebraska.

DEVELOPMENT MANAGER: W. R. Price, jr., appointed manager of commercial development services for the chemical division of General Mills, with headquarters at Kankakee, Ill.

Colgate on the Verge Of a Leap Into Drugs

Colgate-Palmolive Company, on the verge of satisfying a long-standing urge to move into the ethical drug field, is ready to acquire Lakeside Laboratories, Inc., Milwaukee, Wis.

The transaction, involving $13 million in stock, is expected to result in the exchange of one and one-quarter shares of Colgate stock for each share of Lakeside stock now outstanding, if stockholders approve.

Lakeside would be operated as a wholly-operated subsidiary of Colgate under present plans. Evan P. Helfaer, Lakeside president, would become chairman of the new subsidiary.

Drugs made by Lakeside for dispensing on prescription are widely-used in the treatment of heart conditions, mental depression anemia, asthma and gastro-intestinal disorders.

Lakeside has extensive research and manufacturing facilities. A major share of its present sales is represented by ten specialty products, nine of which were developed in the company's laboratories.

Agrico Unit in Operation

American Agricultural Chemicals Company has started up fertilizer production at its recently-completed Johnson Creek, Wis., unit. In addition to manufacturing facilities, the new unit includes space for storing and handling Agrico's line of turf and garden plant foods.

Hormone Makers A Target for Estes' Ol' Squirrel Rifle

Three of the biggest producers of steroid hormones — Schering Corporation, Bloomfield, N. J.; Merck & Co., Rahway, N. J., and the Upjohn Company, Kalamazoo, Mich.,—will be the first of the drug companies to face the ol' Tennessee squirrel rifle of the Kefauver monopoly investigating committee when it opens its drug price hearings December 7. Officials of the companies have been formally notified by the committee.

Sen. Estes Kefauver of Tennessee, committee chairman, released the order of prospective witnesses for the first phase of the upcoming investigation at a press conference last week in which he sought to point up some of the aims of the committee and the grounds it intends to cover in the probe.

Drugs Head Complaint List

He said that during the life of the committee it has received more letters about the high prices of drugs—more complaints —than have been received on any other product.

He added, however, that the committee will concern itself only incidentally with retail drug prices and is more interested in the reasonableness of manufacturers' prices.

As illustrative of the protests the committee has been receiving, he quoted two letters from retired persons living in Iowa and Florida which he said were "typical" of others, praising the committee for initiating the investigation of the industry and "hoping and praying that something will be done about the high price of drugs."

He said the committee is starting with cortisones as the first drugs to be put under examination because "we're getting more letters on cortisone. This is a drug used chiefly by elderly people. We know the price of cortisone is about 30 cents a tablet, and the price to the druggist is about 18 or 19 cents each. Our investigation will deal with the reasonableness of prices."

Sen. Kefauver also said that the hearings will look into the matter of monopoly in the drug industry; whether there is real competition in the industry; whether drug prices are too high, and whether patents are being used to restrain competition in drugs. The committee will also inquire into the tie-ins between drug houses and investment houses and banks.

Before the hearings have been concluded, he added, the committee expects to have all of the major companies in for testimony. He said that about twenty companies will be called for questioning. He added in response to another question that the committee will also look into promotional campaigns of drug producers

—Continued on page 66

Davison Awards Contract For a Sulfuric Acid Plant

Davison Chemical Company, Baltimore, Md., a division of W. R. Grace & Co., has awarded contract for construction of a Monsanto contact sulfuric acid plant to Leonard Construction Company, Chicago.

The plant, which will be located at Bartow, Fla., is slated to have an initial rated capacity of 400 tons per day with built-in facilities for additional expansion, as required. Elemental sulfur will be used as a raw material. Construction will begin immediately with completion scheduled for August, 1960.

American-Marietta Plans Resins Facility on Coast

American-Marietta Company, Chicago, is planning to build a new synthetic resins and adhesives plant next year in Richmond, Calif.

The new facility, part of a $30 million expansion program approved by American-Marietta's board of directors last week, will have an annual capacity of 28 million pounds of resins and adhesives.

The company will also enlarge its resins and adhesives installation in the Pacific Northwest and Newark, Ohio. A new $1 million resin research center was completed by the company this year in Seattle, Wash.

FDA Tags 182 Additives 'Safe' for Use in Foods

One hundred and eighty-two chemical preservatives, emulsifiers, stabilizers and other agents have been tagged "safe" by the Food & Drug Administration and cleared for use in foods, effective December 20.

Another group of seventy chemicals which will be proposed for exemption is in the final stages of clearance and will be published in a few days for review and comments by experts. Also in the works are lists of proposed exemptions in the field of trace minerals, packaging materials, natural spices and herbs and synthetic flavorings.

The list of 182 exempt chemicals announced last week are items "generally regarded as safe" by FDA on the basis of replies from 355 qualified experts responding to an FDA questionnaire sent to about 900 experts throughout the country.

The safety tag attached to the chemicals means that manufacturers need not concern themselves with running tests on these items, and they can be sold for use in foods without furnishing further proof of safety to the government.

The exemptions are based on a proposed list of 188 food chemicals announced December 9, 1958. FDA concluded that all but six of these chemicals could be immediately classed "safe."

The six items knocked off the list are four food coloring materials—carbon black, charcoal, titanium dioxide, and ultramarine blue; and two substances originally listed under the classification of

—Continued on page 46

Bristol Says It Fought for Life In a Tetracycline Trade Jungle

Bristol Laboratories was fighting for its very life when it challenged American Cyanamid Company and Chas. Pfizer & Co. for a piece of the tetracycline business, the president of Bristol-Meyers Company told the Federal Trade Commission last week. Called to testify by counsel for Bristol-Myers, as price-fixing hearings continued in New York, Frederick N. Schwartz described a jungle of competition in which Bristol was offered no quarter by its two giant rivals.

Bristol, both the parent company and its subsidiary — along with four other pharmaceutical makers—has been charged by the commission with conspiring to fix tetracycline prices and to exclude would-be competitors from the business.

Squibb to Testify This Week

Other firms named by the commission are Cyanamid's Lederle Laboratories Division and Pfizer, both of which have finished their defense; the E. R. Squibb & Sons Division of Olin Mathieson Chemical Corporation, slated to testify this week; and Upjohn Company, which will follow Squibb to the stand.

Echoing testimony given earlier in the hearings by John E. McKeen, Pfizer president, and Wilbur G. Malcolm, Cyanamid president, Mr. Schwartz painted a picture of no-holds-barred competition which flatly contradicted the commission's charge of conspiratorial co-existence.

According to the commission, which put its case to rest last spring, tetracycline is unpatentable because of inherent co-production with chlortetracycline. The commission has tried to prove that the respondents knew of this when they applied for patents and entered into licensing agreements.

Mr. Schwartz testified last week that he had not known of inherent co-production, until after the patent was issued but only of inconclusive tests. Under examination by chief counsel Allen T. Klots, he said that none of the lawsuits engaged in by the respondent companies had been of a collusive nature. Mr. Schwartz recalled that when Pfizer brought three patent infringement lawsuits early in 1955, all three fell into Bristol Laboratories' lap, and the company faced the possibility of bankruptcy.

While the company had previously felt it had a strong position on the tetracycline patent, it took a dimmer view when the patent was issued to Pfizer.

"We took a very sober view of our chances at that time," he recalled. "We felt we still had a chance but we didn't evaluate our chances as being too high."

In order to retain the business of its

—Continued on page 39

Fertilizer Plant Planned By Stauffer in California

Stauffer Chemical Company has just broken ground for a new agricultural chemicals plant at Richmond, Calif. Replacing the company's Berkeley, Calif., unit, the plant will be integrated with Stauffer's major Richmond facility.

Slated to be much larger than its Berkeley predecessor, the plant was made necessary, Stauffer says, by the rapid growth of agricultural needs in northern California. Production of a broad range of dry and liquid farm chemicals is expected to get under way by February.

Lime Oil Market Hitting a Sour Note

The lime oil market is hitting a sour note these days. Storm damage has all but wiped out 40 percent of Mexico's lime oil production, and a return to normal isn't expected for three or four years.

This bit of bad news comes from Walter H. Mahanake, New York representative for Union Nacional de Productores de Aceite de Limon, the Mexican lime growers cooperative.

What trees withstood last month's storm in the State of Colima, the country's chief lime-growing province, will be taken out of oil production and used, instead, to supply the fresh fruit market—a much more profitable operation.

About 80 percent of the lime trees growing nearest the coast were hurt, Mr. Mahanake reports. About half the trees growing a bit inland were damaged.

It will take four or five years before lime trees now being planted will start bearing fruit, the Union Nacional representative points out.

The effect on the world market for lime oil is expected to be considerable, as Mexico accounts for nearly 90 percent of the world's production of this citrus oil.

Schering Cuts Antibiotic

Schering Corporation, Bloomfield, N. J., has cut the price of "Fulvicin," its new anti-fungal antibiotic, by 20 percent. Introduced five months ago, the orally administered antibiotic—a penicillin derivative—is said to be consistently effective in the treatment of various fungus infections.

American-Marietta Buys Electrical Materials Maker

American-Marietta Company, Chicago, has taken a further step into the building materials field through cash acquisition of substantially all the stock of Steel City Electric Company, Pittsburgh.

The newly-acquired unit manufactures some 2,000 electrical construction materials, with sales reportedly running in excess of $10 million annually.

The Week's Price Changes

Cottonseed Meal, Peppermint and Spearmint Oils Advanced. Copra, Geranium and Grapefruit Oils, Mercury Reduced.

Prices Advanced

Cottonseed meal, $1 per ton (p. 60).
Corn oil, crude, ¼c. per lb. (p. 60).
Refd., ¼c. per lb. (p. 60).
Peanut oil, crude, 1c. per lb. (p. 60).
Refd., 1c. per lb. (p. 60).
Peppermint oil, nat., 35c. per lb. (p. 53).
Redist., 45c. per lb. (p. 53).
Soybean meal, 50c. per lb. (p. 60).
Spearmint oil, $1.75 per lb. (p. 53).

Prices Reduced

Anisic aldehyde, 5c. per lb. (p. 53).
Candelilla wax, crude, 5c. per lb. (p. 60).
Carnauba wax, No. 3, crude, Ceara, 1c. per lb. (p. 60).
Parnahyba, crude, 2c. per lb. (p. 60).
Yellow, 1c. per lb. (p. 60).
Cocoa butter, 2c. per lb. (p. 60).
Coconut oil, crude, ¾c. per lb. (p. 60).
Copra, $10 per ton ton (p. 60).
Corn foots, 95%, ½c. per lb. (p. 60).
Cootonseed foots, 95%, ¼c. per lb. (p. 60).
Cottonseed oil, crude, ¼c. per lb. (p. 60).
Refd., ¼c. per lb. (p. 60).
Ethyl bezoate, 15c. per lb. (p. 53).
Eucalyptol, 5c. per lb. (p. 53).
Geraniol, soap grade, 10c. per lb. (p. 53).
Geranium oil, Alg., $1.50 per lb. (p. 53).
Bourbon, $8 per lb. (p. 53).
Grapefruit oil, 15c. per lb. (p. 53).
Hydroxycitronellal, 45c. per lb. (p. 53).
Lard, cash, ⅜c. per lb. (p. 60).
Mercury, $2 per flk. (p. 34).
Olive oil, spot, 5c. per gal. (p. 60).
Ouricury wax, crude, 2c. per lb. (p. 60).
Refd., 2c. per lb. (p. 60).
Soybean oil, crude, ¼c. per lb. (p. 60).
Refd., ¼c. per lb. (p. 60).
Tin straits, 1c. per lb. (p. 34).
Salts, ½-⅝c. per lb. (p. 34).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

Nov. 20, 1959	Nov. 13, 1959	Nov. 21, 1958
111.49	111.71	109.69

Fertilizer Market to Hold Up

Fertilizer producers can figure that the market for their products in 1960 will be about the same size as this year's. So says the Department of Agriculture, adding that consumption of fertilizer was from 5 to 10 percent higher in 1959 than in 1958, but that little if any change from the present level can be expected in the year ahead. Production capacity is adequate and returns from fertilizer use are large enough for profitable application of more plant food, the department adds.

In its 1960 outlook report on farm costs, the department notes that prices of nitrogen fertilizers in general averaged about 3 percent lower in 1959 than in 1958, but prices of superphosphate were slightly higher. Prices of muriate of potash were about 1 percent lower.

During the past ten years, prices of fertilizers have changed comparatively little. The price of nitrogen decreased somewhat as new carriers for the element became available, the report says. Changes in prices for mixed fertilizers reflect the component parts. If the mixture is relatively high in nitrogen or K_2O, prices have decreased. If the mixture has a high per-

—Continued on page 51

Dow British Unit Takes Its Parent Firm's Name

Dow Chemical Company's British subsidiary has been re-named after the parent company. From Midland, Mich., comes word that Dobeckmun Britain, Ltd., will hereafter be known as Dow Chemical Company (UK).

In addition to a new name, the British unit will take on some new responsibilities, according to C. B. Branch, manager of Dow's overseas operations.

Mr. Branch reports that the unit will handle direct sales of packaging films manufactured in the United States. It will continue the manufacture and sale of "Lurex," a non-tarnishing metallic yarn, which it produces at Windsor, Berkshire, England.

GAF SALES MANAGER: Carl A. Bergman, appointed to the new position of chemical sales manager for its southern division by General Dyestuff Company, a sales division of General Aniline & Film Corporation, New York.

Airco Plans Gases Facility

Air Reduction Sales Company has broken ground at Baton Rouge, La., for construction of a thirty-ton-per-day air separation plant that will supply high-purity liquefied gases to the gulf states area.

Index to News and Market Reports

Association News

CSMA Award to Hamilton..... 7
CSMA Limits Attendance at Meetings.. 7
CSMA Meeting Topics Picked..... 7
DCAT to Hear Cancer Talk..... 51
Drug Men Want Public Debate..... 5

Government News

Bristol Says It Fought for Life..... 4
Chemical Hopes for Gov't Hypo Fade.... 7
Cranberries Quick Opener for Gov't Probe 3
FDA Tags 182 Additives 'Safe'..... 3
Fertilizer Market to Hold Up: USDA.... 4
Fine Organic Acids Tariff Hike Looms.. 3
DuPont, GM 'Divorce' Finalized..... 5
Hormone Makers Are Kefauver Target.. 3
Toiletries Makers May Visit Washington. 5

Industry News

Agrico Unit in Operation..... 3
Airco Constructing New Unit..... 4
American-Marietta Makes Acquisition... 4
American-Marietta Plans Resins Facility. 3
Borden Erects Pilot Plant..... 5
Caustic Soda Terminal Established..... 3
Chemical Foresight Called Big Need..... 5
Colgate on Verge of Drug Venture..... 3
Davison Awards Building Contract..... 3
Fertilizer Plant Set by Stauffer..... 4
Hercules Extends in Polypropylene..... 5
Lederle Marketing Smallpox Vaccine.... 7
Penick Branch Marks Anniversary..... 51
Rosin Production to Hold, Turps to Rise.. 7
Schering Cuts Fungal Antibiotic..... 4
Scientific Design Reports Plant Status.. 54
Seaway Clarifies Role With Stepan..... 54
Styrene: Monsanto May Be King..... 3
Sulfuric Plant Opened by Dixon..... 5
Sun Implements Expansion Program.... 5
Synthetic Organics Found Steady in '58.. 7
Tung Oil Situation Seen Satisfactory.... 7
Vitamins With No Taste Offered..... 50

International News

CMCSA Elects Wood..... 7
Dow Subsidiary Takes Parent's Name.... 4
Ferro Licenses Tokyo Firm..... 5
Lime Oil Market Hits Sour Note..... 4

Personnel News

Allied Names Tarbox..... 45
Borg-Warner Names Knight..... 38
Dow Names Whiting..... 3
GAF Appoints Bergman..... 4
General Mills Names Price..... 3
Hooker V.P.'s Take on New Duties..... 5
Mellon Director Plans to Retire..... 7
Naftone Names Lilla..... 56
Nalco Chemical Appoints Johnson..... 5
Philadelphia Drug Group Elect Officers.. 58
United Carbon Names Peterson..... 5
Victor's Gillet Retires..... 35
Vitro Minerals Appoints..... 50

Market Reports

Acids 34
Adhesives 41
Agricultural Chemicals 40
Aliphatic Organics 42
Aromatic Chemicals 54
Botanical Drugs, Gums..... 49
Chemical Specialties 58
Coal Chemicals 44
Coatings Materials 55
Drugs 49
Essential Oils 53
Fats & Greases 61
Fertilizer Materials 40
Fine Chemicals 49
Flame Retarding Agents..... 41
Heavy Chemicals 34
Industrial Organic Chemicals 42
Metals, Nonferrous 34
Naval Stores 56
Oil Cake and Meal..... 61
Oils 60
Optical Brighteners 41
Paint Materials 55
Pesticides 40
Petrochemicals 42
Petroleum Derivatives 59
Protective Coatings Materials 55
Spices 54
Surface Active Agents 58
Trade Name Chemicals 41
Waxes 61

General Features

Advertisers' Index 67
Association Meeting Dates 7
Bids Wanted 66
Classified Advertisements 66
Coal Chemical Output 44
Crude Oil Stocks 59
Current Market Quotations 10
Editorials 9
Imports 47
Jobs & People 37
Obituaries 61
OPD Price Index 4
Washington Talks It Over 9

OIL, PAINT AND DRUG REPORTER, Vol. 176, No. 22, November 23, 1959. Published weekly on Monday except semi-weekly the last week in February and the last week in August by Schnell Publishing Company, Inc., 3 Church Street, New York 7, N. Y., U.S.A. Second-Class postage paid at New York, N. Y. Single copy price: 50 cents. Subscription prices:—United States and Possessions, $5 a year; Canada and Newfoundland $7; other countries, $12. Copyright, 1959, Schnell Publishing Company, Inc.

DuPont, GM 'Divorced'

The final "divorce" papers have been signed in the celebrated E. I. duPont de Nemours & Co.-General Motors Corporation case and now the Wilmington, Del., chemical company is obliged to turn over to its stockholders most of the voting rights on its 63 million shares of motor company stock.

United States District Judge Walter J. LaBuy affixed his signature to the papers in Chicago last week at just about the same time that Alfred P. Sloan, jr., honorary chairman of GM, was resigning as a member of the board of directors of duPont.

Mr. Sloan's resignation was in compliance with Judge LaBuy's decision that no person shall serve on the boards of both companies.

Five duPont directors are expected to follow Mr. Sloan's lead and resign from directorships of GM at the December 7 meeting of the Detroit, Mich., automobile manufacturer.

The five are Walter S. Carpenter, jr., chairman of the duPont board, and Lammot duPont Copeland, Henry B. duPont, Emile duPont and Donaldson Brown.

Judge LaBuy's order allows duPont to retain its GM holdings but provides that voting rights will be passed on to all stockholders except members of the duPont family, duPont officials and duPont-family holding companies.

The judge's decision follows a ruling by the Supreme Court of the United States that duPont's holding of 23 percent of GM's shares—a block worth $3 billion at current market prices—violates the anti-trust laws.

Just what will come next in the case is uncertain, but there is the possibility of an appeal by the government. US Attorney General Rogers told a news conference last week that the Department of Justice has not "come to any final conclusion" on whether to test Judge LaBuy's ruling.

Drug Men Want Public Discussion On Delisting More Coaltar Colors

Drug manufacturers are asking the Food & Drug Administration for the right to argue in public the agency's proposal to delist an additional group of coaltar colors that have had widespread use in the drug industry. Involved are the D&C oranges 5 and 8 and D&C reds 9, 10, 11, 12, 19, 33 and 37. These along with several other coaltar colors used in cosmetic manufacture, chiefly lipsticks, are proposed to be removed from the certification list by FDA on the grounds that tests with laboratory animals show the colors to be harmful. The proposal is to limit the use of the colors to products applied externally.

MARKETING VICE-PRESIDENT: Herbert S. Johnson, jr., named vice-president in charge of marketing for Nalco Chemical Company, Chicago.

In a statement filed with FDA, the Pharmaceutical Manufacturers Association has taken issue with contentions of FDA that colors must be delisted.

PMA Summarizes Objections

Petitioning the agency for a hearing where the issues can be argued in public, PMA summarized its objections to the proposed delisting order as follows.

- The colors have been certified by FDA and purchased by member firms in good faith, believing that they are eligible for use in drugs in the very limited quantities typical of the industry. They are used for identification and safety purposes. At the time of certification, FDA represented that it had the scientific background and statutory power to certify these particular dyes. Delisting will cause injury to certain firms.
- PMA maintains that the colors are "harmless and suitable for use" within the limited quantities employed in drugs (for example, D&C red 19 is used in drugs in quantities of one-eighth million of the per

—*Continued on page 38*

Sulfuric Plant Opened By Dixon at Paulsboro

Dixon Chemical Industries, Inc., reports that its new $5 million sulfuric acid plant at Paulsboro, N. J., is now in operation. The facility, which has an annual rated capacity of 300,000 tons of acid, was officially opened last week at ceremonies presided over by Gov. Robert B. Meyner of New Jersey.

According to Arthur W. Dixon, jr., the new sulfuric installation is the start of a

—*Continued on page 51*

Sun Implements Program For Expanded Ink Output

Sun Chemical Corporation, New York, has implemented its plans for expanded ink output by purchase of a plant site in Texas for its General Printing Ink Company division.

Located between Dallas and Fort Worth, the site was selected by Sun to take advantage of the steady growth of the graphic arts industry in north Texas, a company spokesman said.

Toiletries Manufacturers Due To Be Called to Washington Soon; Subject: FDA Cosmetics Bill

The toiletries industry is next in line for special control legislation in the Food & Drug Administration program of shoring up public safeguards against potential harmful chemicals. Cosmetic manufacturers can expect a call from Washington in the very near future to drop in for conferences with FDA officials. On the agenda: the outlines of a bill for pre-testing the toiletry products which the agency intends to submit to congress.

Legislation for closer federal controls over cosmetics by requiring extensive tests for safety before marketing of the industry's products has been introduced in each congress since the Delaney chemical additives investigation of 1950. Chief sponsors have been Rep. James J. Delaney of New York and Rep. Leonor K. Sullivan of Missouri.

FDA to Present Its Own Bill

FDA, however plans to go to congress with its own bill. While it has never expressed on opinion on the Delaney-Sullivan proposal, it is apparent by the agency's intentions that it does not agree with the type of control proposed by the two lawmakers.

Evidently, it hopes to come up with a measure more nearly acceptable to industry, while at the same time providing for adequate consumer safeguards.

Deputy FDA Commissioner John Harvey disclosed FDA's intentions to draft a bill of its own for submission to congress at last week's meeting of the Food Law Institute in Washington, D. C., during a brief address in which he ticked off various legislative proposals in which the FDA has an interest.

Mr. Harvey told the meeting that the view of the Department of Health, Education & Welfare is that a bill for the pre-testing of cosmetics should be pushed, and noted that in the drafting of a bill the department will have several patterns of control to choose firm:

- The "new-drug" type of pre-testing control.
- The food additives type of control.
- The Miller pesticides law type of control.

He explained that under the new-drug type of control clearance is given for the marketing of a drug only upon individual application of each producer. In the case of food additives and pesticides, however, when clearance is given on the use of an additive or pesticide under tolerance limitations to one applicant, anyone else can use the additive or pesticide under the same conditions.

He said that one of the big questions

—*Continued on page 51*

POLYMER RESEARCH CHIEF: Dr. William R. Peterson, appointed supervisor of polymer research for United Carbon Company, New York.

Hooker Vice-Presidents To Take on New Duties

Hooker Chemical Corporation, Niagara Falls, N. Y., has realigned and expanded executive duties of three vice-presidents, effective December 1.

Thomas F. Willers will be responsible for the eastern chemical, phosphorus and Durez Plastics Divisions, as well as for corporate engineering.

F. Leonard Bryant will have responsibility for corporate research, marketing, and general development. John S. Coey succeeds Mr. Willers as general manager of the eastern chemical division.

Robert E. Noble will succeed Mr. Bryant as general manager of the phosphorus division, and Charles Y. Cain will succeed Mr. Coey as sales manager of the eastern chemical division.

At the same time, Dr. Jay C. Searer, general manager, Durez Plastics Division, announced that James W. Ferguson has been appointed sales manager of the Durez Plastics Division to fill the vacancy created by the recent death of Alfred W. Hanmer (OPD, 11/16/59).

Hercules Does Encore In Polypropylene Field

Hercules Powder Company, Wilmington, Del., intends to build its second polypropylene plant. The new facility, with a design capacity of over 100 million pounds a year, will be put up at Lake Charles, La.

The first Hercules plant has been in operation at Parln, N. J., since the latter half of 1957. It has an annual capacity in excess of 50 million pounds of high-density polyethylene and polypropylene.

Construction of the new and larger facility at Lake Charles will get under way immediately, with completion of the first 50-million-pound unit scheduled for early 1961.

The Louisiana installation will be supplied with propylene by Petroleum Chemicals, Inc., which is jointly owned by Cities Service Company and Continental Oil Company.

The property on which Hercules' new plant will be constructed was formerly

—*Continued on page 51*

Ferro Licenses Tokyo Firm To Produce PVC Stabilizers

Ferro Chemical, a division of Ferro Corporation, Bedford, Ohio, has licensed a firm in Tokyo, Japan, to manufacture and sell its line of heat and light stabilizers for polyvinyl chloride resins.

License arrangements have been concluded between Ferro and Nissan-Ferro Organic Chemical Company, Ltd., a subsidiary of the Nissan Chemicals Company, Ltd. Initial production of Ferro stabilizers in Japan is scheduled for January, 1960.

Borden's New Pilot Plant Is Erected at Leominster

Borden Chemical Company, New York-headquartered division of Borden Company, has completed construction of a pilot plant at Leominster, Mass., the first step in a $2.5 million expansion program there.

Designed to produce up to 1,000-pound lots of polyvinyl alcohol, polyvinyl acetate, acrylics, butadiene-styrene and other products, the pilot plant is being operated by Borden Chemical's polyco-monomer department.

Chemical Foresight Called Big Need Right Now

As the chemical industry rounds into the explosive 1960's, it faces larger, more complex problems than ever before.

And its success in solving them and gathering in the big prizes of the decade will depend on how far ahead chemical industry executives can look today. That's the way John O. Logan, associate general manager of Olin Mathieson Chemical Corporation's chemicals division, sees the challenge facing the chemical industry.

Mr. Logan, who is also a vice-president of Olin Mathieson, told the members' council of the New Orleans, La., Chamber of Commerce last week: "Change is ever with us. Changes today are making tomorrow's future. And the future belongs to those who recognize change and prepare for it."

Among the changes to watch out for, he feels, are governmental inroads into the management function, the high and possibly increasing cost of capital and the competition of imported products.

If the chemical industry wants to keep its place in the sun, these trends will have to be prepared for now, he believes.

As to the short term situation, his opinion is that "Business now is and has been good."

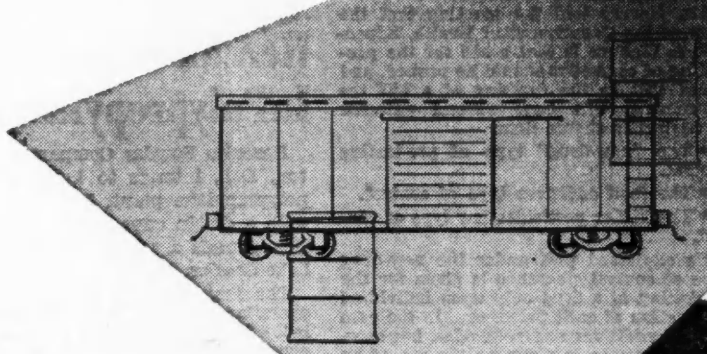
"Regarding 1960," he says, "we see good business all through the year, but this could be upset by two situations which alarm us." Those situations, he indicates, are the unsettled labor disputes in steel and the railroads, which, if they erupted into strikes, would have cumulative bad effects on the economy.

"Barring the two aforementioned developments," he says, "1960 should be an excellent business year."

Now
a new basic producer
of an old workhorse!

METHYL SALICYLATE
from **PENICK**

from drums
to carloads



Fast...
from five stockpoints

PENICK

NYQ *Chemical Division*

S. B. PENICK & COMPANY • 100 CHURCH ST., NEW YORK 8 • 735 W. DIVISION ST., CHICAGO 10

HEADS CANADIAN ASS'N: Geoffrey H. Wood, president and general manager of G. H. Wood & Co., Ltd., Toronto, who has been elected president of the Canadian Manufacturers of Chemical Specialties Association.

Tung Oil Situation Offers No Problems

As the tung oil industry enters a new marketing year, another two-year supply of oil is in sight to satisfy domestic requirements at current consumption levels. Total domestic supplies for the 1959-60 season are expected to be about 106 million pounds, approximately the same as in the previous year.

That will be the case, says the Department of Agriculture, if estimates of 1959 tung oil production and carryover stocks on November 1 are correct, and if the full quota of 26 million pounds is imported in the new marketing year.

As a consequence, tung oil prices (Southern mills) to producers in the 1959-60 marketing year will average near the support level of 20.9 cents a pound, the same as last year, the department adds.

In the 1960 outlook issue of "The Fats and Oils Situation," quarterly publication of the USDA, the department estimates the 1959 tung crop, which is just beginning to move to the market in volume, at around 40 million pounds, compared with the 1958 record of 45 million pounds. The first official estimate of crop will be released December 16.

Carryover stocks of tung oil on November 1, 1959, the beginning of the 1959-60 tung marketing year, are estimated also at 40 million pounds, slightly more than last year. Of this, about 30 million pounds

—*Continued on page 56*

Mellon Research Director Planning His Retirement

Dr. William Allen Hamor, senior director of research at Mellon Institute, Pittsburgh, Pa., will retire December 31 after forty-five years at the institute and more than a half-century of service to science.

Dr. Hamor has been called "the greatest living American authority on the literature of chemistry." He is the author or co-author of nearly 200 articles and publications, including five books. He has also edited, during his forty-five years as a key figure at Mellon Institute, some 3,000 articles, books and other publications.

Chemical Hopes for Gov't Hypo Of Exports Via 'Buy in US' Policy For ICA Purchases Shattered

Gone aglimmering are chemical industry hopes of a government hypodermic for export sales via its new "Buy American" policy. The short-lived dream was abruptly swept away last week by Secretary of State Christian A. Herter, who explained to the National Foreign Trade Council in New York that the buy-it-here idea will be applied only to International Cooperation Administration funds distributed for development—such things as power plants, harbor improvements and railroads.

Apparently there'll be no change in non-project procurement, that part of the ICA program of greatest interest to chemical producers. ICA will continue its long-standing policy of making such purchases from all free world sources.

What ICA Spent Last Year

As outlined by Secretary of State Herter, spending authority on development projects—estimated at around $400 million last year—will be shifted from ICA to the Development Loan Fund. ICA spent another $937 million for economic aid last year.

Here's what the agency spent for chemicals and allied products during the past fiscal year:

- Fertilizers—$47,113,000, of which $13,589,000 (or 29 percent) went to American producers.
- Chemicals—$68,595,000 for chemicals and related products, of which $27,611,000 (or 40 percent) went to US producers.
- Medicinals—$19,670,000 for medicinal and pharmaceutical preparations, with $7,789,000 (or 40 percent) accounted for by US drug houses.
- Agricultural Pesticides—$14,220,000, of which the US accounted for $13,692,000 (or 96 percent).
- Industrial Chemicals — $10,866,000, with American firms getting $1,003,000 (or 9 percent) of the total.
- Coaltar Chemicals—$8,462,000, of which US makers accounted for $825,000 (or 10 percent).

Secretary Herter's statement last week was aimed at squelching reports that there's been a split between State and the Treasury Department over the new "Buy in US" concept.

First word of the new policy came last month when Vance Brand, director of DLF, disclosed that from here on out the fund intended to require that money lent

—*Continued on page 45*

CSMA'S 1959 AWARD WINNER: Herbert W. Hamilton, for many years secretary of the Chemical Specialties Manufacturers Association, who has been chosen to receive CSMA's 1959 achievement award.

CSMA Meeting to Stress Both Efficiency, Marketing

Efficiency and marketing know-how are two themes which will be stressed at the forty-sixth annual meeting of the Chemical Specialties Manufacturers Association, to be held at the Mayflower hotel, Washington, D. C., December 7 to 9.

Activities on the opening day will be given over to a meeting of the board of governors and to committee meetings of the six CSMA divisions. Meetings of the various divisions will follow during the next two days.

On December 8 there will be a luncheon address by Cameron Hawley, whose topic will be, "The Quality of Leadership."

The program for the next day will start off with a general session, which will feature reports of the association's officers. These will be followed by a talk, to be

—*Continued on page 57*

Synthetic Organics Fairly Steady in '58

Synthetic organic chemicals and their raw materials showed only a little fluctuation in 1958 as compared to 1957 with regard to output, sales and value. So reports the Tariff Commission in its just-issued forty-second annual report on these materials.

Production last year came to 83,994 million pounds, or a decrease of 1 percent from the 84,847 million pounds produced in 1957.

Sales in 1958, say the tariff people, amounted to 45,527 million pounds, compared to 45,375 million pounds in the previous year. Product value last year was put at $6,028 million, compared to $6,077 million in the previous year.

The report comprises three major sections—those on chemical raw materials,

—*Continued on page 67*

CSMA Moves to Restrict Attendance at Meetings

Chemical Specialties Manufacturers Association has moved to limit attendance at future midyear and annual meetings.

Representatives of non-member companies may now attend only as prospective members on invitation of the association's president, CSMA reports. Heretofore, attendance has been open to all who wished to register.

Rosin Production To Remain Same; Turps Will Go Up

Gum rosin production can be expected to remain unchanged in the 1959 crop year at about 1,850,000 drums, while turpentine output will rise about 2 percent to 620,000 barrels. But prices of gum rosin may be 12 percent higher, while turpentine quotations will be up only about 4 percent.

In the years ahead, little change is anticipated in turpentine prices, but rosin quotations will continue on the upgrade —although rosin will still remain a relatively inexpensive chemical raw material.

So says the Department of Agriculture in this year's special report on the demand and price situation for forest products.

Downward Trend in Turpentine Halted

The slight increase in turpentine production expected for the 1959 crop halts a downward trend which started in 1956, USDA points out.

Rosin output attained a plateau after increases in 1957 and 1958, the department adds. However, lower rosin production is anticipated in 1960.

This year, increased production of sulfate wood turpentine and of tall oil rosin is likely to offset the decreased output of gum and steam-distilled wood naval stores, the report says.

Here's USDA's analysis of the naval stores production outlook for the next few years:

"In the next few years, lower rosin production and not much change in turpentine output appears to be the pattern. However, the shift in output sources is likely to increase — away from naval stores steam distilled from wood and toward naval stores recovered as a by-product of the kraft paper industry.

"Moreover, as crude pine gum prices edge higher in response to increased rosin demand and prices, it is likely that the long-term downtrend in production of gum naval stores will be reversed.

"Rosin production in the 1960 crop year is expected to be the lowest since 1953 because of an estimated 8 percent decrease in the steam distilled output from 1959 levels. This decrease is not likely to be fully offset by increased output of other types.

"Further substantial declines in output of steam distilled rosin are anticipated in subsequent years. By 1965, judging from reports of available first growth pine stumpwood, production may be

—*Continued on page 58*

Lederle Has New Vaccine For Fighting Smallpox

Lederle Laboratories has put on the market a new smallpox vaccine which it says reduces the possibility of excessive scarring and local infection. The Pearl River, N. Y., division of American Cyanamid Company reports that the new vaccine is obtained from chicken embryos rather than calf lymph.

Another advantage claimed for the new product is its ability to be produced much more quickly than the calf lymph varieties. In the event of a sudden epidemic, Lederle says, large quantities of its "Avianized" vaccine could be made readily available for mass immunization programs.

Association Meetings

American Institute of Chemical Engineers, annual meeting, Sheraton Palace hotel, San Francisco, December 6-10.

Asphalt Institute, technical and executive meetings, Shoreham hotel, Washington, D. C., November 30-December 3.

Association of American Soap & Glycerine Producers, annual convention, Waldorf-Astoria hotel, New York, January 20-22.

Association of Consulting Chemists & Chemical Engineers, luncheon meeting, Shelburne hotel, New York, February 9.

Chemical Buyers' Group of National Association of Purchasing Agents, midwinter conference (midwestern and western divisions), Congress hotel, Chicago, January 27-28; midwinter conference (eastern division), Commodore hotel, New York, February 3-4.

Chemical Industries Exposition, New York Coliseum, New York, November 30-December 4.

Chemical Specialties Manufacturers Association, annual meeting, Mayflower hotel, Washington, D. C., December 7-9.

Chemurgic Council, annual conference, Sheraton-Park hotel, Washington, D. C., March 16-18.

Drug, Chemical & Allied Trades Association, fall luncheon meeting, Waldorf-Astoria hotel, New York, November 30.

Interstate Oil Compact Commission, annual meeting, Sheraton hotel, Philadelphia, December 3-5.

Manufacturing Chemists' Association, mid-winter meeting Statler Hilton hotel, New York, November 24.

National Association of Manufacturers, annual congress of American industry, Waldorf-Astoria hotel, New York, December 2-4.

Oil Trades Association of New York, meeting, Waldorf-Astoria hotel, New York, December 20.

Pharmaceutical Manufacturers Association, eastern regional meeting, Waldorf-Astoria hotel, New York, December 7-9; central regional conference, Edgewater Beach hotel, Chicago, February 8-10.

Salesmen's Association of the American Chemical Industry, installation luncheon, Roosevelt hotel, New York, January 19.

Society of Cosmetic Chemists, annual meeting, Commodore hotel, New York, December 2.

Society of the Plastics Industry, reinforced plastics division conference, Edgewater Beach hotel, Chicago, February 2-4.

Synthetic Organic Chemical Manufacturers Association, annual meeting, Roosevelt Hotel, New York, December 2.

Toilet Goods Association, scientific section's mid-winter meeting, Waldorf-Astoria hotel, New York, December 1.

VITAMINS by the TONS

Come RIGHT from ROCHE

Important Riboflavin Development

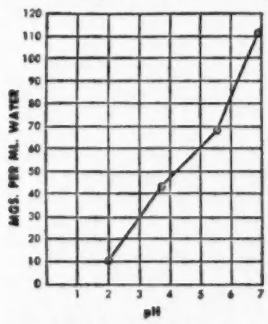
✓ **Higher solubility** ✓ **Better taste**

✓ **No solubilizer needed** ✓ **Commercial production**

USE ROCHE RIBOFLAVIN 5′-PHOSPHATE SODIUM

higher solubility

Now you can make clear solutions with a concentration of 30 mg. or higher per ml. of water when you use the new Roche riboflavin-5′-phosphate sodium. No longer do you need to use solubilizers and special techniques to achieve a satisfactory solution. Remember the trouble you had in getting a solution of even 2 mg. of riboflavin per ml.? Those days are now past.



SOLUBILITY of Roche riboflavin-5′-phosphate sodium in water at different pH levels; room temperature.

These data show that solubility of Roche B_2 phosphate sodium depends on hydrogen ion concentration in water. It is useful to note that the solubility of riboflavin U.S.P. (approximately 0.12 mg. per ml.) inserted on graph would fall just above the base line.

specifications Tests show that B_2-5′ (M.W. 514.4) has the full theoretical activity on the molecular basis of riboflavin (M.W. 376.36). Theoretically one gram of the phosphate is equivalent to 0.73 grams of riboflavin. The Roche product contains small amounts of moisture, disodium salt, diphosphate ester and unesterified riboflavin. It has a riboflavin activity of 70-73% by weight.

biological availability Roche riboflavin-5′-phosphate sodium has immediate biological activity because it is identical with the natural flavin mononucleotide occurring in the "yellow" respiratory tissue enzyme system.

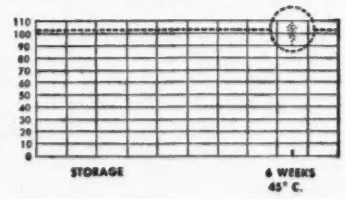
better taste Roche riboflavin-5′-phosphate sodium does not have the intensely bitter taste of riboflavin itself. It is more palatable in high concentrations. The different taste is of definite advantage in oral preparations.

solubility—taste demonstration You can prove to yourself, easily and quickly, the solubility-taste advantages of Roche riboflavin-5′-phosphate sodium with the Roche demonstration kit. Ask your Roche representative to show it to you. Or we'll be glad to send one, without charge, at your request.

cost comparison Even though the cost of Roche B_2-5′ is somewhat higher than regular riboflavin, its use can result in actual savings. You eliminate expensive solubilizers and unnecessarily large amounts of niacinamide. You reduce or eliminate costly complaints and returns. You are able to make manufacturing economies.

stability

Chart demonstrates stability of Roche product in B-complex parenteral solutions with and without vitamin C over wide potency range.



uses The new riboflavin-5′-phosphate sodium, probably the most important riboflavin development since Roche introduced the vitamin commercially in 1941, is specially designed for use in manufacturing:

- **pharmaceutical** vitamin injectable solutions, drops and elixirs, gelatin capsules and chewable tablets
- **food enrichment**, especially if by liquid application

CALL **ROCHE** FOR VITAMINS

VITAMIN DIVISION

HOFFMANN-LA ROCHE INC.

NUTLEY 10, NEW JERSEY • NOrth 7-5000 • New York City: OXford 5-1400

In Canada: Hoffmann-La Roche Ltd., *Vitamin Place*, 1956 Bourdon Street, St. Laurent, Montreal 9, P.Q.

Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

Founded October 18, 1871 by William O. Allison
Directed 1908-1942 by Harry J. Schnell

EDITOR AND PUBLISHER: William S. Auchincloss
ASSISTANT PUBLISHER: J. Stuart Auchincloss
MANAGING EDITOR: Arthur R. Kavaler
TECHNICAL EDITOR: Edwin M. Fisher
NEWS EDITOR: Gene Gasteiger

OPD SPECIAL REPORTS: Don L. Richards

MARKETS: Kathryn H. Auchincloss, Andrew C. Barchi, John L. Casey, James Gubitosi, Jacqueline Hudgins, Harvey McCormick, Harry Van

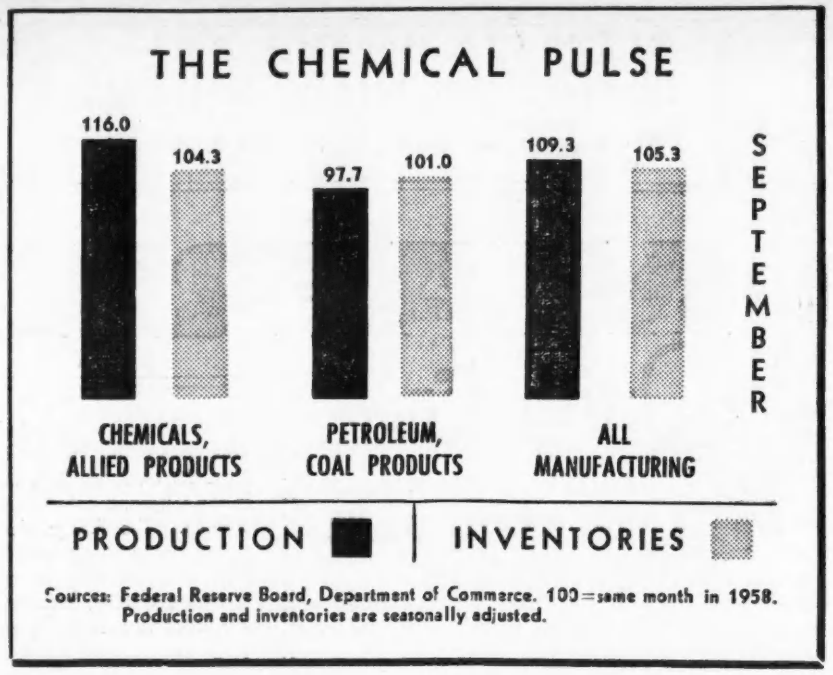
IMPORTS: Mary Van Grieff

CONSULTING EDITOR: Hugh Craig
WASHINGTON EDITOR: Ralph L. Cherry

SCHNELL PUBLISHING COMPANY, INC., 30 Church Street, New York 7, N. Y.
(REctor 2-9820) Cable Address: Reporter, New York
PRESIDENT: William S. Auchincloss
VICE-PRESIDENT: Jean Schnell Auchincloss
TREASURER: William S. Auchincloss
ASSISTANT TREASURER: Ruth D. Johnson
SECRETARY: Anne L. Koch
ASSISTANT SECRETARIES: J. Stuart Auchincloss, Sara Jane Auchincloss

Copyright 1959 by Schnell Publishing Company, Inc.
Member of Audit Bureau of Circulations

Volume 176 November 23, 1959 No. 22



Sources: Federal Reserve Board, Department of Commerce. 100=same month in 1958. Production and inventories are seasonally adjusted.

Study of Latins Is Set Up

One can quite reasonably believe that, among those who have for some months been quite pointedly critical of the foreign policies and practices of the federal administration, there are more than a few who are saying: "Well; it's about time!" now that they have learned that the President has set up a non-government committee which he is hoping will contribute at least something toward the remedying of the recently growing manifestation of sentiments against the United States among Latin Americans. The creation of such an agency was recommended last January by the President's brother in a report covering his investigatory visit to several Latin-American countries.

The purpose of his final appointment of the six-man group is, according to the President, to "consider current and long-range problems in our relations with Latin America and to make recommendations to the Secretary of State in connection therewith." It is his belief—and hope—that the group will perform a very useful function in promoting wider understanding of inter-American relations among the people of this country." It is certainly to be hoped that he is right and that understanding will contribute to better practices in inter-American relations on the part of those whose shortcomings in that respect are in some part responsible for the antagonistic sentiments which have motivated the setting up of the study group.

In the President's evaluation, the members of the new National Advisory Committee on Inter-American Affairs are "well qualified, each having a wide and perceptive knowledge of Latin America." It is to be believed that everyone will agree on that with respect to one member—Dr. Milton Eisenhower. But, because the Secretary of State, who named the members, is chairman of the committee, and his assistant for inter-American affairs is vice-chairman, those who have been critical of that department's policy are going to have at least some doubts on how the group will be permitted to function, even though there is good reason to accept the President's evaluation of the qualifications of its members. An exception might come from the chemical industry with reference to one member, who is an AFL-CIO vice-president and president of the Oil, Chemical & Atomic Workers Union.

The new agency has a very big and difficult job of diagnosing and prescribing in a most complicated situation in political, social and commercial economics. However wide and perceptive may be its members' knowledge of Latin America, it has room—and need—for more knowledge and for ability and willingness to apply that knowledge.

Much that it should study most earnestly and thoroughly came up in the three-day discussion of "The United States and Latin America" at the sixteenth American Assembly in mid-October. Particularly significant in interest was the consideration given there to the needs of Latin-American nations for financial assistance by way of loans and for the creation of a beneficial balance between agrarian and industrial activities. US delegates stressed the matter of loans—and less than a month later, the Argentine Minister of Economy arrived by plane in New York on his way to Europe where, as a local news item had it, "he hopes to get loans to support Argentina's 1960 economic stabilization program!"

Is it any wonder that the Reds are making much headway in finding and grasping opportunities to promote anti-US sentiment among the Latins? It is to be hoped—and it should be helped—that the legal action started in Buenos Aires about a month ago to outlaw communism will have a fully successful result.

One of the chief reasons why this country's problems in Latin-American relations are seriously difficult is that they arise from many different causes in the different countries. The understanding most needed on the part of US people to make the NACI-AA undertaking mean anything worthwhile must have adequately to do with such things as what is needed to combat the effects of the paranoiacal delusions in Cuba should not be applied in such cases as those arising from the injured pride of the Panamanians. But, both peoples should be taught the whole truth, perhaps, in the case of Cuba, by official following of the example set by at least two steamship lines, which have quit making tourist stops at Havana, by refusing to issue passports for pleasure visits to Cuba.

As the President is so much concerned—and rightly so—with the unsatisfactory condition of inter-American relations, he should arrange when he has finished his "healing of rifts" among NATO members during his trans-Atlantic touring, to do some of the same missionary servicing of the members of the Organization of American States, taking due cognizance of such things as how come that one week after it had been publicly reported from Washington that the United States would not permit the creation of anti-Castro regimes by Cuban exiles here, such an organization was set up in New York. And not overlooking at the other extreme the potentialities of the joint summer program of Columbia, Cornell and Harvard universities for study of Latin-American culture.

Personnel Relations

These are days of continuous wrangling between industrial management and labor leaders over a constantly increasing number of matters stemming from what is to be done—and who is to direct its doing—with reference to everything from automation to work rules. The usual results are stalemates and strikes, with very little, if anything, being gained by either side.

For those who look upon such matters and all other aspects of employment relations as being fundamentally human relations, there is a welcome ray of encouragement in the presentation at the public affairs session in the recent meeting of the American Petroleum Institute of a contribution on "Employees—Our No. 1 Public." The contributor was an oil company's director of public affairs. His basic theme was: "The case for better employee communications can be based on two self-evident truths: (1) It pays to communicate. Because informed employees are more effective and more productive, we can afford to do a good communications job; and (2) With the tremendous social and political problems facing this industry, we can't afford not to." His conclusion was: "Our industry could easily become the best-loved and most highly respected enterprise in the world if every person in it becomes an informed good-will ambassador."

It will pay every member of every industry to become fully acquainted with what the API committee on public affairs has been and is providing for use in the training of such ambassadors.

Because of recognition that, as the oilman said, "informed employees are more effective and more productive," the adoption of employee-information programs has been steadily developing over the past few years, and free reading racks have been installed in hundreds of places of employment. Their initiation is credited to this country's largest manufacturer of motor vehicles. The effectiveness of this system is reported to have been well demonstrated in a recent survey sponsored by the company in New York which specializes in supplying booklets for the stocking of employees' reading racks. If you are interested in joining in this variously beneficial program, ask us for the name and address of the booklet supplier.

Washington Talks It Over

Chemical, Bacteriological and Radiological Weapons Are Causing Behind-the-Scenes Military Hassle Over How Much Money the Nation Should Spend on Research and the Policy It Should Pursue.

By Ralph L. Cherry
Washington Editor

A behind-the-scenes hassle is going on within the nation's security set-up that will interest chemical companies in many important respects. It has to do with the amount of money the Army should spend next year on developing and testing new chemical warfare weapons and the policy his government should pursue on the use of weapons of this type.

Whenever chemical warfare is mentioned, most people recall the horrors of World War I and the use of tissue-searing mustard gases. But today's chemical weapons are a far cry from those of that day. Military leaders have in mind nerve gases and incapacitating gases that cause temporary mental aberrations.

Because of the public aversion to chemical warfare, based largely on the experiences of World War I, the National Security Council has a policy that chemical, bacteriological or radiological weapons should never be used by this country in war except in retaliation. The Army, however, claims that the advances in this field have been so great that CBR weapons can, and should, now be incorporated into our weapons system.

Army officials did such a good job of selling this to the top brass in the Pentagon that instead of a requested $40 million for further research in these fields, Pentagon authorities were ready to double the program to $80 million until the chemical officers cautioned that they would have difficulty in spending such an amount.

Besides the very favorable reports that had been received of tests of the "psychochemicals" on animals, there were also reports of substantial advances in chemical, bacteriological and radiological weapons by the Soviet Union.

The issue probably won't be decided until sometime next spring when the military budget is presented to congress. The belief now is that it will contain about $55 million for research and testing in this field instead of the $80 million the authorities are willing to support.

There has been an increasing amount of publicity given recently to developments in the field of chemical, bacteriological and radiological warfare. This is due in large measure to efforts on the part of Army officials to elevate the standing of this kind of warfare in the public's mind by blotting out the pictures of World War I.

CHEMICALS AND RELATED MATERIALS

All matters under this heading fully protected by copyright.

Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, Nov. 20 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil, cns ..... lb. 2.45 - 3.00
Acacia (see Arabic gum).
Acenaphthene, below 92.5 C. m.p., dms., works lb. .40 - —
Above 92.5 C. m.p., bbls., dms., lb. .41 - .50
Acetaldehyde, 99% dms., c.l., works, lb. .12 - —
dms., l.c.l., works ..... lb. .13½- —
tanks, works ..... lb. .10 - —
Acetaldol (see Aldol)
Acetanilide, tech., flaked, bbls., bgs. c.l., frt alld lb. .32½- —
bbls., bgs., ton lots, frt. alld. lb. .33½- —
bbls., bgs., smaller lots, frt. alld lb. .36½- —
USP, bbls., 225-lb dms any quantity lb. .79 - —
100-lb. dms., any quantity lb. .81 - —
Acetic acid, coml. or redist., 28%, bbls 100 lbs. 4.80 - —
56%, bbls. ..... 100 lbs 8.25 - —
70%, bbls. ..... 100 lbs. 9.95 - —
80%, bbls. ..... 100 lbs.10.45 - —
Acetic acid, glacial, syn., CP, dms., dlvd 100 lbs.22.00 -23.00
tech., dms. c.l., dlvd. .. 100 lbs.13.75 - —
dms., l.c.l., dlvd. ..... 100 lbs.15.25 - —
tanks, dlvd ..... 100 lbs.10.00 —
USP, cbys., dlvd .... 100 lbs.31.00 -32.00
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E lb. .16½- —
aluminum ret. dms., l.c.l., dlvd E. lb. .18 - —
tanks, dlvd. E. ..... lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
fib dms., l.c.l., dlvd. ..... lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb. 1.35 - —
fib. dms., l.c.l., dlvd. ..... lb 1.36 - —
Acetoacet-o-toluidide fib. dms., c.l., dlvd lb. .82 - —
fib. dms., l.c.l., dlvd. ..... lb. .83 - —
Acetone, CP, dms., c.l., dlvd. . lb .11 - —
dms., l.c.l., dlvd ..... lb. .12½- —
tanks, dlvd. ..... lb. .08½- —
Acetonitrile, dms., c.l., works .. lb. .45 - —
dms., l.c.l., works ..... lb. .45¾- —
tanks, works ..... lb. .43 - —
Acetophenetidin, USP, 200-lb. dm., 1,000 lbs., frt. alld lb. 1.22 - —
100-lb. dm., 1,000 lbs., frt. alld. lb. 1.24 - —
Acetophenone, cns., dms. ..... lb. .42 - 1.30
Tech., dms., c.l., works ..... lb. .37 - —
dms., l.c.l., works ..... lb. .37¾- —
tanks, works ..... lb. .35 - —
N-Acetyl-p-aminophenol 1,000-lb. lots, frt. adjusted lb. 1.45 - —
smaller lots, dms., same basis lb. 1.55 - 1.63
Acetylene black, imp., bgs., c.l., duty and freight extra lb. .19 - —
cs., l.c.l., ex whse. lb. .24½- .30
Acetylsalicylic acid, USP, special, makers, primary distrib., bbls., 1,000-lb. lots, point of shipt lb. .63½- —
USP, standard, fine, cryst. gran., (20-40 mesh) powd., (80 mesh), 250-lb. bbls., c.l., t.l., same basis lb. .55¼- —
Freight equald, shipt identical quantity over standard routes, from N. Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .35½- —
non-ret. dms., l.c.l., frt alld. E. of Denver lb. .36½- —
tanks, frt. alld. E. of Denver, lb. .33 - —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb .40½- —
tanks, frt. alld. E. of Denver lb. .37 - —

ACIDS

Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls. ..... lb. .50 - .55
Acrolein, tech., dms., c.l., works lb. .51 - —
dms., l.c.l., works ..... lb. .51¾- —
tanks, works ..... lb. .46 - —
Acrylamide, dms., t.l., f.o.b. works, lb. .58 - —
dms., l.t.l., same basis ..... lb. .60 - —
Acrylic acid, glacial, dms., c.l., t.l., frt. alld. lb. .57 - —
dms., l.c.l., l.t.l., frt. alld .. lb. .58 - —
Acrylonitrile, dms. c.l., t.l., frt. equald lb. .2949- .2950
dms., l.c.l., l.t.l., frt. equald lb. .3049- .3050
tanks, frt. equald ..... lb. .2649- —

Abies Siberica Oil—Ammonium Bifluoride

Adeps lanae (see lanolin).
Adipic acid, bgs., c.l., dlvd. ..... lb. .32¼- —
bgs., l.c.l. dlvd. ..... lb. .35 - —
Agar, USP, Kobe No. 1, strip, bls. lb. 2.10 - —
powd., 30 mesh., fib., dms lb. 2.40 - —
dl-Alanine, dms., 100-lbs. or more, f.o.b., works lb. 5.25 - —
dms., 1-99 lbs., same basis ... lb.10.00 - —
Aldol, 95%, dms., l.c.l. ..... lb. .28 - —
Aldrin, tech., fib. dms., c.l., t.l., dlvd lb. .99 - —
fib. dms., l.c.l., dlvd ..... lb. 1.04 - —

ALCOHOLS

Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aletris root, bgs. ..... lb. 1.75 - 1.85
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. E. of Rockies lb 2.38 - —
Alkali blue, toner, litho flushed, 125-lb. bbls., same basis, lb. 1.35 - —
Alkali blue prices 1c. higher W. of Rockies.
Allethrin, 90%, dms., frt. alld lb.28.80 -28.90
Soln., 20% dms., 200-2,000 lb. lots, frt. alld lb. 6.50 - 6.55
2½% dms. frt. alld. ..... lb. .95 - 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l. dlvd. .... lb. .32½- —
dms., l.c.l., dlvd ..... lb. .34 - —
tanks, dlvd. ..... lb. .30 - —
Allyl bromide 55-lb. cbys. 5,005 lbs. or more, works lb. 1.47 - —
55-lb. cbys., 1,045 to 4,950 lbs., works lb. 1.52 - —
55-lb. cbys., 55 to 990 lbs. works, lb. 1.57 - —
Allyl chloride, dms., c.l., dlvd. . lb. .17½- —
dms., l.c.l., dlvd ..... lb. .19 - —
tanks, dlvd. ..... lb. .15 - —
Allyl isocyanate (see Mustard Oil, syn.).
Almond oil, artif, bitter (see Benzaldehyde).
Almond oil, nat., bitter f.p.a., bots. lb 2.75 - 3.45
NF, bots. ..... lb 3.00 - 3.30
sweet, USP, cns., dms. ..... lb. .70 - 1.30

Abbreviations

Used in OPD Market Quotations

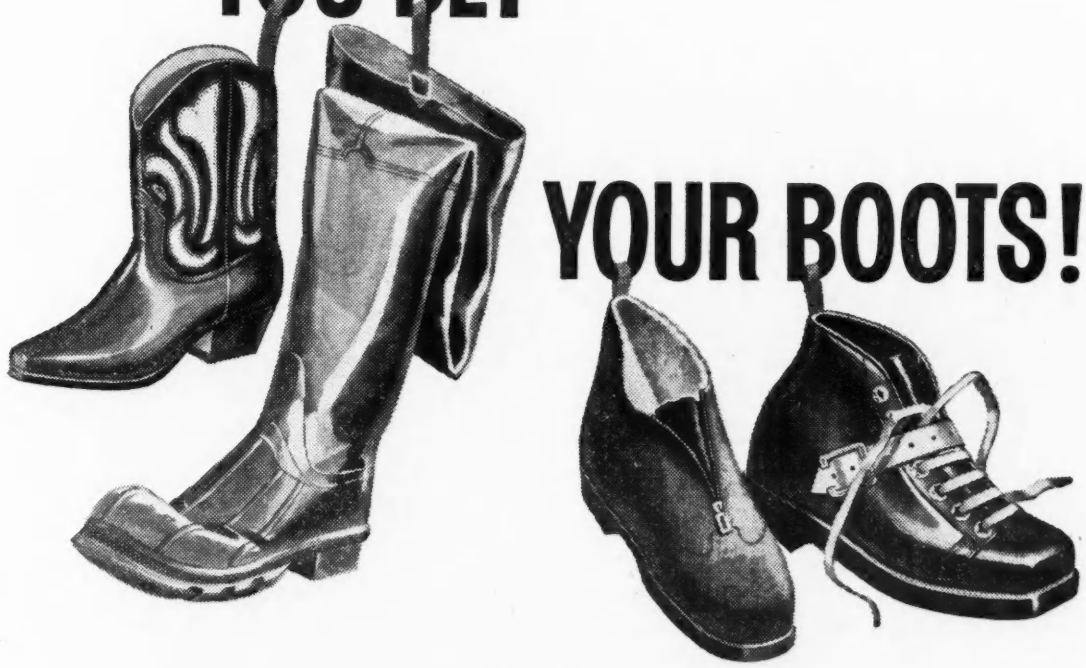
alld.	allowed	distr.	distributor	No.	number
amorph.	amorphous	djns.	demijohns	nom.	nominal
AMP	American melting point	dlvd.	delivered	o-	ortho
anhyd.	anhydrous	dms.	drums	ord.	ordinary
AOAC	Association of Official Agricultural Chemists	dom.	domestic	oz.	ounce
		E.	east	p-	para
		e.p.	end point	Pac.	Pacific
a.p.a.	available phosphoric acid	equald.	equalized	pf.	proof
		exp.	expressed	phos.	phosphate
approx.	approximately	Ext.	external	photo.	photographic
artif.	artificial	F.	fahrenheit	pkgs.	packages
ASTM	American Society for Testing Materials	ferment.	fermentation	powd.	powdered
		f.f.a.	free fatty acid	precip.	precipitated
		f.f.c.	free from chlorine	prod.	producer
Atl.	Atlantic	fib.	fiber	pt.	point
Be.	Baume	f.o.b.	free on board	pulv.	pulverized
bbls.	barrels	f.p.a.	free of prussic acid	purif.	purified
bgs.	bags	frt.	freight	redist.	redistilled
bls.	bales	gal.	gallon	refd.	refined
bots.	bottles	gran.	granular	refy.	refinery
b.p.	boiling point	grd.	ground	reg.	regular
b.p.l.	bone phosphate of lime	I.&a.	iron and aluminum	resub.	resublimed
				ret.	returnable
b.r.	boiling range	i.b.p.	initial boiling point	SD	specially denatured
bxs.	boxes	imp.	imported	s.d.	single distilled
C.	centigrade	incl.	included	S. E.	southeast
cbys.	carboys	indust.	industrial	sec.	secondary
CD	completely denatured	kgs.	kegs	secs.	seconds
		l-	laevo	s.g.	specific gravity
c.i.f.	cost, insurance, freight	lacq.	lacquer	shipt.	shipment
		lb.	pound	soln.	solution
cks.	casks	l.c.l.	less than carlots	s.u.	standard unit
c.l.	carlots	l.t.l.	less truckload	syn.	synthetic
cns.	cans	liq.	liquid		
coml.	commercial	mfrs.	manufacturers	tanks.	railroad tankcars
conc.	concentrated	m-	meta	tech.	technical
CP	chemically pure	m.a.p.	mixed aniline point	tert-	tertiary
cps.	centipoises			t.l.	truck loads
cryst.	crystalline	min.	minimum	t.w.	tank wagons
cs.	cases	m.p.	melting point	USP	U. S. Pharmacopoeia
ctns.	cartons	N-	nitrogen		
cyls.	cylinders	n-	normal	vis.	viscosity
d-	dextro	nat.	natural	VM&P	varnish makers & painters
dbl.	double	neut.	neutral		
denat.	denatured	NF	National Formulary	W.	west
dest-dist	destructively—distilled	NNR	New and Nonofficial Remedies	whse.	warehouse
dl-	dextrolaevo			w. w.	water-white
dist.	distilled				

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Aloe, Cape, cs. ..... lb. .35 - .4
powd., cs. ..... lb. .60 - .6
Curacao, bgs. ..... lb. .60 - .7
powd., bgs. ..... lb. .80 -
Aloin, USP bbls., dms., bgs. ... lb. 3.25 - 3.7
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalen
Alphapicoline (see a-Picoline).
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium, gran., bgs., works 100 lbs. 4.30 -
lump, dms., works ..... 100 lbs. 5.05 -
powd., dms., works ..... 100 lbs. 5.20 -
USP, burnt dms. ..... lb. .20 - .2
hydrous, dms. ..... lb. .07¾- .0
Alum, potassium, gran., bgs. works. 100 lbs. 4.55 -
lump, dms., works ..... 100-lbs. 5.30 -
powd., dms., works ..... 100 lbs. 5.45 -
USP, burnt., dms. ..... lb. .20 - .2
USP, hydrous, dms. ..... lb. .07¾- .0
Alum, potash-chrome, dms. ..... lb. .17 -
Alumina, calcined, bgs., c.l., works. lb. .05 -
bgs., l.c.l., works ..... lb. .05¼- .0
Aluminum acetate, basic soln., 24%, bbls., l.c.l., works lb. .14 -
Aluminum chloride, coml., anhyd., dms., c.l., works, frt. equald lb. .16 -
dms., l.c.l., works ..... lb. .16½-
cryst., dms., c.l. works 100 lbs.21.00 -
dms., l.c.l., works 100 lbs.21.50 -
Soln., 32° cybs., c.l., works... lb. .0495-
cbys., l.c.l., works ..... lb .0570-
tanks, works ..... 100 lbs. 3.95 -
NF, gran., dms., works ..... lb. .31 - .3
Aluminum fluoride, tech., anhyd., bgs., c.l., works lb. .17¼-
bgs., l.c.l., works ..... lb. .18¼- .2
bulk, c.l., basis 80% ..... lb. .14½-
Aluminum fluoride in fib. dms. 0.35c. per lb. higher
Aluminum formate, basic soln., containers extra c.l., works. 100 lbs.11.00 -
containers extra, l.c.l. works. 100 lbs.11.50 -
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .03½-
bgs., 20,000-40,000 lb lots, same basis lb. .03¾-
bgs., 2,000-20,000 lb. lots, same basis lb. .04¾-
bulk, c.l., same basis lb. .03¼-
Aluminum hydroxide, dried, USP XV, fib. dms., works lb. .82½-
fib. dms., contract, works lb. .79½-
Aluminum hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib. dms., works lb. .22 -
9-9½% Al_2O_3, fib. dms., works lb. .19 -
fib. dms., contract, works. lb. .18 -
Aluminum hydroxide, tech., powd. (See Aluminum hydrate).
Aluminum metal, 99%+, ingots, 10,000-lb. lots, frt. alld lb. .2680-
pigs, 10,000-lb. lots, frt. alld lb. .2470-
Aluminum oxide, amorphous (See Alumina, calcined).
Aluminum paste, lining, extra-fine, dms lb. .69½-
Standard grade, dms. ..... lb. .47 -
Aluminum powder, lining, extra-fine, dms lb. 1.11 -
Standard grade, dms. ..... lb. .81 -
Aluminum paste and powder prices are f.o shipping point. Add 1c. per lb. for 100-lb. d 1½c. per lb. for 50-lb. dm., 3c. per lb. for lb can and 5c. to 12c. per lb. for smaller c tainers. Deduct 1c. per lb. for single shipm of 400 to 1,499 lbs., 2c for 1,500 to 4,999 l 3c. for 5,000 to 29,999 lbs. and 4c. for 30, lbs. or more. Where destination is within continental U. S., a deduction equivalent to lowest available common carrier transportat rate will be made from seller's invoice orders of 200 lbs. or over
Aluminum resinate, precip., 2.1% t.t.l., dms lb. .36¼-
Aluminum stearate, dibasic, ctns., c.l lb. .39 -
ctns., l.c.l. ..... lb. .40 - .4
Monobasic, ctns., c.l. ..... lb. .39 -
ctns., l.c.l. ..... lb. .40 - .4
Tribasic, ctns., c.l. ..... lb. .39 -
ctns., l.c.l. ..... lb. .40 - .4
Aluminum sulfate, coml., grd., bgs. c.l., works, frt. equald ton.41.00 -
bulk, c.l., same basis ... ton.40.00 -
lump, bgs., c.l., same basis ton.44.00 -
iron-free, bgs., c.l., works, frt. equald 100 lbs. 3.80 -
bgs., l.c.l., works, frt. equald, 100 lbs. 4.30 - 8.3
USP, gran., dms., works ..... lb. .30 -
USP, powd., dms., works ..... lb. .27 -
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots ..... oz. 6.50 -10.0
p-Aminoacetanilide, tech., paste, dms., frt. alld lb. 1.57 -
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.50 - 1.7
Aminoazotoluene base, bbls., 100% basis lb. 1.03 - 1.1
p-Aminobenzoic acid, tech., dry, dms., works lb. 1.72 -
2-Amino-4-chlorophenol, tech. solid, dms., frt. alld lb. 8.10 -
p-Aminodiphenylamine, tech., solid, dms., frt. alld lb. 3.00 -
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 -
dms., l.c.l., dlvd ..... lb. .49 -
tanks, dlvd. ..... lb. .45 -
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 -
dms., l.c.l., frt. alld. ..... lb. .45 -
tanks, frt. alld. ..... lb. .42 -
m-Aminophenol, dist., dms., ton lots. lb. 2.05 -
dms., smaller lots. ..... lb. 2.30 -
p-Aminophenol, dms., frt. alld. lb. 1.15 -
Aminophylline, USP, 100-lb. dm., frt. alld lb. 3.25 -
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.40 -
Ammonia, anhyd., fertilizer, tanks, works, frt. equald. E. of Rockies. ton.86.00 -
refrigeration, tanks, works, frt. equald E. of Rockies ton.88.50 -
Aqueous, 29.4%, tanks, works, anhyd. basis, E. of Rockies. ton.89.00 -
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal, gray, bgs., c.l., works, frt, equald 100 lbs. 8.25 -
bgs., l.c.l., same basis 100 lbs. 8.65 -12.6
Ammoniac, sal., white (see Ammonium chloride, tech.).
Ammonium acetate, purif., dms lb. .40 -
Ammonium benzoate, USP, fib. dms. ton lots, works lb. 1.00 -
fib dms. 1,000-lb lots, works. lb. 1.05 -
Ammonium biborate, gran., dms., c.l., works. ton.325.00 -
dms., ton lots, ex whse. 100 lbs.20.40 -
dms., smaller lots, ex whse. 100 lbs.21.15 -
Ammonium bicarbonate, dom., dms., c.l., works. 100 lbs. 7.00 -
dms., l.c.l., works ..... 100 lbs. 9.00 -
Ammonium bichromate, dms., works. lb .42 - .4
Ammonium bifluoride, dms., dlvd lb. .2145- .2

Ammonium bromide, NF, dms., c.l., t.l., frt. equald lb. .44 - —
dms., l.c.l., same basis lb. .46 - —
Ammonium carbonate, USP, lump, dms., c.l lb. .15¼ - —
Ammonium chloride, tech., fine gran., bgs., c.l., works 100 lbs 5.75 - —
bgs., l.c.l., works 100 lbs 7.75 - 8.20
USP, gran, 6b dms lb .17¼ - —
Ammonium citrate, dibasic, 250-lb. dm. f.o.b works lb .77 - —
Ammonium dichromate (see Ammonium bichromate).
Ammonium fluoride (see Ammonium bifluoride).
Ammonium gluconate, tech., 200-lb. dm. f.o.b works E lb. .45 - —
Ammonium hydroxide (see Ammonia aqueous)
Ammonium iodide, NF, 25-lb. jar, f.o.b. works lb 4.26 - —
Ammonium lauryl sulfate, dms., c.l., frt. alld lb .20½ - —
dms., t.l.l. frt. alld lb .21½ - —
tanks, frt. alld lb .19½ - —
Ammonium lignin sulfonate bgs. c.l., works 100 lbs 3.25 - —
bgs., l.c.l., works 100 lbs 3.40 - 3.65
Ammonium linoleate, 80% dms., works lb .50 - .55
Ammonium molybdate, CP, cryst., fib dms. 15,000 lbs works lb 1.22 - —
fib dms. 2,000-lb contracts, works lb 1.23 - —
single fib dms, works lb 1.24 - —
Ammonium nitrate dom tertilizer grade, 33.5% N, bags, f.o.b. works ton 66.00 - —
with dolomite, 20.5% N, bgs. c.l., Hopewell, Va ton 48.00 - —
Imp. Canadian 33.5% N, eastern bgs. c.l., ship't point frt equald to $3 ton base price ton 66.00 - —
Ammonium oxalate, tech., fine gran 250-lb dm f.o.b works E lb 28½ - —
Tech., powd., 200-lb. dm., same basis lb. .28½ - —
Ammonium pentaborate gran. bgs. c.l. works ton 195.00 - —
bgs., ton lots, ex whse 100 lbs. 14.23 - —
bgs., smaller lots, ex whse 100 lbs. 15.48 - 17.48
Ammonium pentaborate powder $10 per ton higher in bags
Ammonium persulfate tech., dms., 10-ton lots or more, works. lb 18 - —
dms smaller lots works lb 20 - 23
Ammonium phosphate, comt., bgs. c.l. works frt equald lb 09¼ - —
bgs. t.c.l. same basis lb. 10 - —
Ammonium phosphate, dibasic, NF V bbls dms lb 46 - —
Tech., bgs., c.l., works, frt. alld. lb. .03¼ - —
Ammonium silicofluoride, dms., works lb 11¾ 13¼
Ammonium sulfamate bgs. c.l. t.l., works lb 19 - —
bgs. t.c.l. works lb 20½ - 27
Ammonium sulfate standard granular bulk f.o.b works base price ton 32.00 - —
purif. bgs. f.o.b. works lb 03½ - .15
Large granular bulk, c.l., works. ton 35.00 - —
bgs. c.l., works ton 40.00 - —
Tech. bulk c.l. t.l. works ton 52.00 - —
bgs. c.l., t.l., works ton 56.00 - —
bgs. l.c.l. t.l. works - 100 lbs 3.20 - 7.20
Ammonium sulfide, liq., 40-44% tanks frt. equald 100% basis ton 160.00 - —
Ammonium sulfocyanide tech (see Ammonium thiocyanate)
Ammonium thiocyanate, tech., cryst. dms., c.l., works lb. .22 - —
dms. t.c.l. works lb .22 - .26
Tech., soln., 50%, tanks, frt. equald, basis ammonium thiocyanate content lb. .17¼ - —
Ammonium thioglycollate, comt., cbys., 100% basis lb 1.35 - 1.65
Highly purif., cbys 100% basis lb 1.70 - 1.96
d-Amphetamine hydrochloride, di basic bots lb. 17.50 - 23.00
dl-Amphetamine hydrochloride, di basic bots lb 4.50 - 6.00
d-Amphetamine hydrochloride, mono basic dms lb 17.50 - 21.00
d-Amphetamine phosphate, fib dms., 100-lb lots lb 15.00 - —
dl-Amphetamine phosphate, dms lb 4.20 - 5.00
d-Amphetamine sulfate, fib dms., lb. 15.00 - 17.00
dl-Amphetamine sulfate, fib. dms., lb 4.20 - 5.00
Amyl acetate, ex fusel oil, tech., dist., from 125° to 150°C., dms., c.l., frt alld E of Rockies lb. .18½ - .19
dms., l.c.l. same basis lb. .20 - .20½
tanks same basis lb .16 - .16½
Ex pentane, reg., dms., c.l., dlvd. lb. .19 - —
dms., l.c.l., dlvd lb. .21½ - —
tanks, dlvd. lb. .16½ - —
tech., dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd lb. .18½ - —
tanks, dlvd. lb. .14½ - —
Syn., oxo process, dms., c.l., dlvd. lb. .19 - —
dms., l.c.l., dlvd lb. .20½ - —
tanks, dlvd. lb. .16½ - —
Amyl alcohol, ex fusel oil (see Fusel oil refd.).
Amyl alcohol, ferment, refd., 128°-132°C., dms., l.c.l., dlvd lb. .43½ - —
refd., ACS grade, dms., l.c.l., dlvd lb. .45½ - —
Amyl alcohol, ex pentane, mixed, amyls, dms., c.l., frt. alld. lb. .19 - —
dms., l.c.l. frt. alld lb. .20½ - —
tanks, frt. alld lb. .16½ - —
primary, dms., c.l., frt. alld. lb. .19¾ - .20¼
dms., l.c.l., frt. alld lb. .21¼ - .21¾
tanks, frt. alld lb. .17¼ - .17¾
sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
dms., l.c.l., works lb. .20½ - —
tanks, works. lb. .17 - —
tert-synthetic, dms., c.l., frt. alld. E lb. .17 - —
dms., l.c.l., frt. alld. E lb. .18½ - —
tanks, frt. alld E lb. .14½ - —
Amyl alcohol, 1-pentanol (syn. normal), dms., c.l., works lb. .41½ - —
dms., l.c.l., works lb. .43 - —
tanks, works lb. .39½ - —
Amyl alcohol, 2-pentanol, dms., c.l., works lb. .65 - —
dms., l.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Amyl n-butyrate, dms. lb. 1.00 - 1.25
Amyl cinnamic aldehyde, dms lb. 1.70 - 2.20
p-tert Amyl phenol, dms., c.l., works. lb. .26¾ - —
dms., l.c.l., works lb. .27¾ - —
Amyl salicylate, cns., dms lb. .73 - 1.00
Amyris oil, dms lb. 1.50 - 1.90
Anethole, tech., dms. lb. .92 - 1.00
USP, cns., dms. lb. 1.12 - —
Angelica root, bls. lb. .90 - 1.00
Angelica root oil, bots lb 120.00 - 140.00
Angelica seed oil, bots lb 120.00 - 130.00
Aniline, dms., c.l., frt alld lb. .20 - —
dms., t.c.l. frt. alld. lb. .21 - —
tanks frt alld lb. .18 - —
Aniline oil (see Aniline)
Aniline salt, dms., c.l., truckloads, 20,000 lbs min. frt. alld. lb. .33 - —
dms., t.c.l., same basis lb. .35 - —
Anise oil, USP, dms. lb. 1.75 - 3.00
Anise seed Mexican bgs lb. .22 - —
Spanish, bgs lb .19 - —
Anisic aldehyde, dms lb. 1.50 - 2.20
o-Anisidine, dms. c.l. frt. alld lb. .80 - —
dms., t.c.l. same basis lb. .82 - —
tanks, same basis lb. .78 - —
p-Anisidine, dms., works lb. .97 - —
Anthracene 90-95%, dms., c.l., t.l., f.o.b. works lb. .42½ - —
dms., l.c.l. minimum shipment 1,000 lbs., same basis lb. .45 - —
Anthranilic acid, 99% 150-lb dms., dlvd lb. 1.15 - —
Anthraquinone, 99.5% bbls., c.l., frt alld lb. .83 - —
bbls., t.c.l., same basis lb. .86 - —
Electrical grade, bbls., t.c.l., same basis lb. 1.10 - —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines. lb. .29 - —
cs., c.l., mines lb. .29½ - —
Antimony oxide, bgs., c.l., frt. alld. lb. .24½ - —
bgs. t.c.l., frt alld. lb. .26 - —
Prices of antimony oxide are 2% higher west of the Rockies.
Antimony sulfide, approx 65%, bgs., 10,000-lb. lots, dlvd lb. .23 - —
bgs., smaller lots, dlvd lb. .24 - .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
pails, t.c.l., works lb. .43 - —
Antimony-potassium tartrate, tech., powd., 250-lb. dm., f.o.b. works, E lb. .69¼ - —
USP, powd., 250-lb. dm., same basis. lb. .74½ - —
Antipyrine, NF, 200-lb. bbls lb. 3.50 - —
Apomorphine hydrochloride, USP, bots., 25-oz. lots oz. 35.60 - —
Apricot kernel oil, USP, dms. lb. .70 - 1.25
Arabic gum, amber sorts, 10 bgs. lb. .29½ - —
USP, powd., bbls. lb. .34½ - —
Areca nuts, powd., bbls. lb. .13 - —
Arecoline hydrobromide, NF, bots., tins oz. 4.00 - —
1-Arginine, free base, dms., 10-kilo lots or more kilo. 90.00 - —
1-Arginine glutamate, dms., 10-kilo lots or more kilo. 60.00 - —
1-Arginine hydrochloride, dms., 10-kilo lots or more kilo. 60.00 - —
Arnica flowers (true Montana), bls. lb. .75 - —
Arsenic, crude (95%), bulk, c.l., works lb. .016 - —
bbls., c.l., works lb. .031 - —
Arsenic trioxide, USP, dms lb. .48 - —
Arsenic, white, powd., bbls., c.l., works lb. .04½ - —
bbls., t.c.l., works lb. .06½ - .07½
Arsenous acid, tech. (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb 3.70 - —
Light shades, bbls. lb 2.85 - —
Asafetida gum, cns lb .36 - .40
Powd., bbls dms lb .75 - .80
Asbestine (see Talc, fibrous, New York)
Asbestos, Canadian crude
6D, c.l. (30 tons) mines ton 86.00 - —
7D, c.l. (30 tons) mines ton 75.00 - —
7F, c.l. (30 tons) mines ton 71.00 - —
7H, c.l. (30 tons) mines ton 61.00 - —
7K, c.l. (30 tons) mines ton 50.00 - —
7M, c.l. (30 tons) mines ton 44.00 - —
7R, c.l. (30 tons) mines ton 43.00 - —
7RF, c.l (30 tons) mines ton 44.00 - —
7T, c.l. (30 tons) mines ton 41.00 - —
7TF c.l (30 tons) mines ton 44.00 - —
Asbestos prices are in Canadian funds; l.c.l. lots $4 per ton higher
Ascorbic acid, USP 25, 50-kilo dms., kilo. 10.00 - —
10 kilo dms. kilo. 10.35 - —
5-kilo dms. kilo. 10.75 - —
1-kilo bottle kilo. 11.00 - —
500-gram bottle kilo. 11.50 - —
Ash black (see Barium sulfide).
Asphalt, gilsonite, black jet, bgs., c.l., mines ton 40.00 - —
ex-whse N Y, N J ton 86.50 - —
seconds, 300°-390°F fusing pt., bgs., c.l., mines ton 35.00 - —
select, 350°F. fusing pt., bgs., c.l., mines ton 41.00 - —
270°-295°F. fusing pt., bgs., c.l., mines ton 40.00 - —
Manjak No. 10 crude, dms., works. lb .07 - —

YOU BET



YOUR BOOTS!

YOU CAN DEPEND ON PUBLICKER...

FOR UNIFORM QUALITY
STEADY SUPPLY
PROMPT DELIVERY

ETHYL ALCOHOL
ETHYL ACETATE
BUTYL ALCOHOL
BUTYL ACETATE
N-BUTYL CHLORIDE
ACETONE
ACETALDEHYDE
ACETIC ACID
AMYL ACETATE
REFINED FUSEL OIL
ISOAMYL ALCOHOL

PUBLICKER INDUSTRIES Inc.

1429 WALNUT STREET, PHILADELPHIA 2, PA.

NEW YORK • NEW ENGLAND • PUBLICKER ALCOHOL & CHEMICAL SALES CORP.

MIDWESTERN DISTRIBUTORS, PUBLICKER CHEMICAL CORP.

PHILADELPHIA—LOCUST 4-1400 • NEW YORK—OXFORD 5-4160 • BOSTON—HOMESTEAD 9-0022

CHICAGO—RANDOLPH 6-6678

Asphalt—Bone Phosphate

Asphalt, petroleum, cut-back, tanks, tankwagon, refy. gal. .09½- —
emulsion tanks tankwagon, refy. gal. .09½- —
steam-refd., 50-80 penetration, tanks, tankwagon, refy. ton 21.00 - —
85-300 penetration tanks, tankwagon refy ton 20.00 - - -
Aspirin (see Acetylsalicylic Acid)
Atropine, NF, tins oz 5.75 6.50
Atropine sulfate, USP bots oz 5.25 - 5.75
Avocado oil, cns., f.o.b. Calif. lb. 2.25 - 3.00

B

Bacitracin, bulk, 1,000,000,000 or more units 50,000 units. .65 - —
less than 1,000,000,000 units. 50,000 units .70 - —
Balm of Gilead buds, dried bgs lb 1.25 1.35
Barberry root bark, bgs..... lb. 1.00- 1.25
Barbital, NF, 100-lb. dms. ..... lb 4.50 - —
Barbital sodium NF dms ... lb 4.75 - —
Barium carbonate, precip., bgs., c.l., works ton 111.50 - —
bgs. smaller lots, works ton 126.50 - —
Barium chlorate, dms., works lb .32 - .41
Barium chloride, anhyd., bgs., c.l., works ton 176.00 - —
bgs. l.c.l., works .....ton 196.00 - —
NF, cryst., 100 lb. dms.....lb. .22 - —
Tech. cryst. bgs., c.l., works. 100 lbs 7.00 - —
bgs., l.c.l., works.....100 lbs 8.00 - —
Barium chromate, bgs. frt. equald. lb. .38 - —
Barium dioxide (see Barium peroxide).
Barium hydrate, cryst., bgs., c.l., t.l., frt. equald ton 206.00 - —
bgs., l.c.l. t.l.l., frt equald ton 218.00 - —
Barium monohydrate, 99%, bgs., c.l., frt. equald 100 lbs. 11.25 - —
bgs., l.c.l., frt. equald 100 lbs. 11.75 - —
Barium monoxide (see Barium oxide)
Barium nitrate, bbls. c.l., t.l., dlvd. lb. .16 - —
bbls., l.c.l., t.t.l., dlvd lb. .17 - —
Barium oxide, grd., dms. c.l. t.l., frt. equald ton 275.00 - —
dms., l.c.l., t.t.l., frt. equald. ton 285.00 - —
Barium peroxide, dms. frt equald. lb. .20 - —
Barium stearate, ctns. c.l. frt alld. lb. .41 - —
ctns., l.c.l., same basis lb. .42 - .46
Barium sulfate, tech. (see Barytes and blanc fixe).
Barium sulfate, X-ray, 100-lb. dm. lb. .19½- —
Barium sulfide dms., c.l., works. ton 100.00 - —
dms., l.c.l., works ..... ton 110.00 - —
Barytes, southern, off-color, bgs., mines ton 25.00 - —
95-75%, bgs., mines ton 25.00 - —
white, water-grd., paper bgs., c.l., St. Louis ton 55.00 -55.25
paper bgs., ex whse., New York ton 79.85 - —
Battery acid, cbys. c.l. works, E. 100 lbs. 2.35 - —
cbys., l.c.l., works, E ....100 lbs. 2.65 -10.95
Bauxite, bulk, mines ..... ton. 7.00 -10.00
Bay oil, NF, Puerto Rican, 50-55% cns. lb. 1.95 - 2.70
55-60%, cns. ... lb 2.50 - 3.05
NF, West Indian, 50-55%, cns., dms. lb. 2.35 - —
Bayberry wax, bgs.....lb. .45 - .50
Beeswax, crude, African, bgs ...lb. .53 - .55
Brazilian, bgs. .....lb. .58 Nom.
Central American, bgs.....lb. .55 Nom.
Chilean, bgs. .....lb. .59 Nom.
Refd., USP bleached white, bricks, 100-lb. ctns lb. .69 - .71
white, slabs, 100-lb. ctns....lb. .68 - .70
yellow, bricks, 100-lb. ctns. lb. .59 - .61
yellow, slabs, 100-lb. ctns. lb. .58 - .60
Belladonna leaf, bls. .....lb. .26 - —
Belladonna root, bls. .....lb. .28 - —
Bentonite, dom. 200 mesh, bgs., c.l., mines ton 14.00 - —
imp. Italian, white, high gel., bgs., 5-ton lots, ex whse ton 95.20 - —
bgs., 1-ton lots, ex whse ton 99.00 - —
Imp., Italian, white, low gel., bgs., 5-ton lots, ex whse ton 93.40 - —
bgs., 1-ton lots, ex whse. ton 97.16 - —
Benzal chloride, cbys., works lb. .44 - —
Benzaldehyde, NF, dms.....lb. .80 - 1.05
Tech., dms., c.l., t.l.....lb. .47 - —
dms., l.c.l. .....lb. .48 - —
Benzene, coaltar, pure or nitration, tanks, works:
Bethlehem, Pa. ..... gal. .31 - —
Birmingham district ....gal. .31 - —
Chicago district .....gal. .31 - —
Cleveland district .....gal. .31 - —
tanks, works:
Geneva, Utah .....gal. .31 - —
Johnstown, Pa. .....gal. .31 - —
Lackawanna, N. Y. ....gal. .31 - —
Lone Star, Tex. .....gal. .31 - —
Lorain, Ohio .....gal. .31 - —
Middletown, Ohio .....gal. .31 - —
Benzene, coaltar, pure or nitration, tanks, works: Minnequa, Colo. gal. .31 - —
Philadelphia district ....gal. .31 - —
Pittsburgh district .....gal. .31 - —
Sparrows Point, Md. ..gal. .31 - —
Syracuse, N. Y. .....gal. .31 - —
Terre Haute, Ind. .....gal. .31 - —
Youngstown, Ohio.....gal. .31 - —
Benzene, petroleum, nitration or industrial, Houston, Tex., tanks, gal. .31 - .40
Benzene hexachloride, 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride, tech., high gamma, dms., c.l., dlvd., gamma unit-lb. .00825- —
dms., l.c.l., works gamma unit lb. .009 .0095
Tech., low gamma, dms., c.l., dlvd. gamma unit-lb. .00825- —
dms., l.c.l., works gamma unit-lb. .009 - —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.19 - —
bbls., l.c.l., same basis lb. 1.21 - —
Benzidine sulfate, tech., bbls., frt. alld., 100% basis lb. 1.21 - —
Benzidine yellow, AAA, bbls. dlvd. lb. 2.30 - —
AAOT, bbls., dlvd. .....lb. 2.55 - —
Lightfast, bbls., dlvd. .....lb. 3.40 - —
Benzocaine, dms. .....lb. 3.48 - 3.50
Benzoic acid, tech., bbls., dms., c.l., t.l., frt., alld lb. .37 - —
bbls., dms., ton lots, same basis lb. .41 - —
bbls., dms., 1,000-lb. lots, same basis lb. .43 - —
USP, bbls., dms., ton lots ... lb. .48 - —
bbls., dms., 1,000-lb. lots ... lb. .50 - —

BENZOL

Benzol quotations, both coaltar and petroleum, may be found under Benzene.

Benzoin gum Sumatra cs. ... lb .33 - —
Benzophenone, dms. ..... lb. 1.40 - 1.65
Benzotriazole, tech., dms., 1,000-lb lots, works lb 2.25 - —
Benzotrichloride, cbys., 1,000-lb. lots or more, frt., equald lb. .21 - —
cbys. smaller lots, frt., equald lb. .23 - —
Benzoyl chloride, cbys., dms., c.l., works, frt., equald lb. .22 - —
cbys., l.c.l., same basis lb. .23 - —
tanktrucks, dlvd Metropolitan area lb. .21 - —
Benzoyl peroxide, purif., fib dms., 50 to 1,000-lb lots, works lb. .98 - 1.08
Benzyl acetate, t.f.c., cns. cms lb. .58 - .79
Benzyl alcohol, NF, dms. lb. .58 - .80
Tech., dms., dlvd lb. 47½- .65
Benzyl benzoate, NF, USP, 40-lb. dms lb. .68 - —
Benzyl chloride, tech., cbys., dms., c.l., works, frt., equald lb. .22½- .25⅛
cbys., dms., l.c.l., same basis lb. 23½- 25⅛
tanktrucks, dlvd., Metropolitan area lb. .21 - —
A 2½c. differential is quoted on benzyl chloride in 5-gal. cbys. In steel dms. prices are ½c lower
Benzyl cinnamate, cns. ..... lb. 3.30 - 3.60
Benzyl dimethylamine, dms., works. lb 2.25 - —
Benzyl formate, cns. ..... lb 1.85 2.10
Benzyl isoeugenol, cns. .....lb. 9.25 - —
Benzyl propionate, bots. ..... lb 1.35 - 1.65
Benzyl salicylate, bots. .....lb. 1.50 - 1.65
Benzylidine acetone, bots. ..... lb. 1.75 1.80
Benzylidine chloride (see Benzal chloride).
Berberine bisulfate, cns lb 48.50 - —
Berberine hydrochloride, bots lb 48.50 - —
Bergamot oil, nat. NF, Italian, cns. lb. 12.60 -14.00
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphthylamine).
Betaoxynaphthoic acid (see b-Oxynaphthoic acid).
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, tech.)
Biotin, cryst., bots. ..... gram 10.00 - —
Biphenyl (see Diphenyl).
Birchtar oil, crude, cns. ..... lb 1.50 1.90
Rectified, cns. .....lb 1.75 2.00
Bismuth chloride, tars ..... lb 5.11 —
Bismuth hydroxide, dms. ..... lb 4.60 4.65
Bismuth metal, bxs. ton lots ... lb 2.25 —
Bismuth nitrate, cryst., dms ... lb 2.08 2.17
Bismuth oxide, anhyd., 100-lb. dm., f.o.b. works lb 4.42 - —
Bismuth oxychloride, 25-lb. dm., f.o.b. works lb 4.42 - —
Bismuth subcarbonate, USP, dms. lb 3.20 - —
Bismuth subgallate, NF, 200-lb. dm., f.o.b. works lb. 3.15 - —
Bismuth subiodide, NF, fib dms lb 5.37 - —
Bismuth subnitrate, NF, 200-lb. dm., f.o.b. works lb. 2.65 - —
Bismuth subsalicylate, USP, 100-lb. dm., f.o.b. works lb. 3.50 - —
Bismuth-ammonium citrate, USP, powd., jars lb 4.22 - —
Bisphenol-A, bgs., c.l., t.l., single shipt., 70,000-lbs. or more, frt. alld lb .29½- —
bgs. c.l. t.l. less than 70,000 lbs., same basis lb. .30 - —
bgs. l.c.l. same basis lb .31 - —
Blackberry root bark, bls. .... lb .50 - .55
Black haw root bark, bls. .... lb .63 - .65
Black haw tree bark, bls ... lb 45 50

BLACK PIGMENTS

Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

Blanc fixe, direct process, bgs. c.l., works ton 145.00 - —
bgs., l.c.l., works ton 155.00 - —
bgs. l.c.l. New York whse ton 195.00 - —
Blood, dried, 16-16½% ammonia, bgs., New York unit-ton. 5.00 - —
high-grade, unground, 16-17% ammonia, bgs., Chicago unit-ton. 5.50 - —
Bloodroot, bls. ..... lb. .90 - 1.00

BLUE PIGMENTS

Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes)
Blue vitriol (see Copper sulfate)
Bois de rose oil, Brazilian, dms lb 1.90 2.55
Peruvian, dms lb 1.80 2.25
BON acid maroons, pure, bbls lb 1.75 —
Resinated, bbls. lb 1.50 —
Bone black, dms. l.c.l. frt. alld lb .18 - .22¾
Pacific coast bone black prices 2c. per lb. higher
Bonemeal, steamed, works, E ton 75.00 - —
Bone phosphate, defluorinated or lime (see Defluorinated phosphate).
Bone phosphate, precip. (see Calcium phosphate, tribasic).

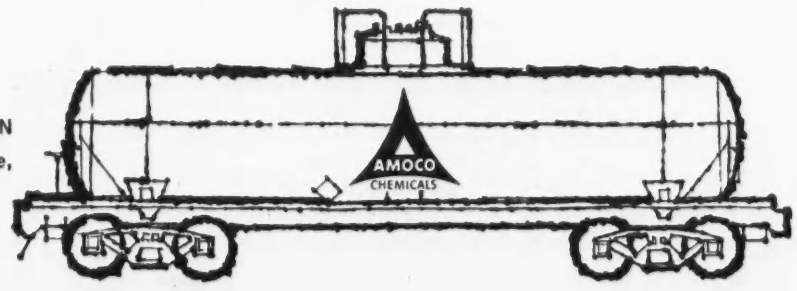
AMOCO PANASOL AROMATIC SOLVENTS

Here are eight aromatic solvents Amoco Chemicals offers for paint and insecticide use. You will find in this product line a solvent with the right solvency and evaporation rate to help you make quality formulations competitively priced.

TYPICAL PROPERTIES

PANASOL Solvent No.	RX-3	RX-4	RX-5	RX-21	RX-22	AN-1	AN-2	AN-3
Distillation, °F.								
IBP	276	282	355	316	368	400	420	450
10%	286	285	362	320	375	424	443	466
50%	304	291	374	328	383	444	462	476
90%	335	308	397	341	400	464	484	500
EP	—	—	—	—	—	494	520	534
DP	360	320	415	348	420	—	—	—
Aromatics, Vol. %	76	94	70	98	98	98	99	99
Color, Saybolt	30	30	26	30	26	17	—	—
Color, ASTM	—	—	—	—	—	—	1	1
Gravity, °API, 60°F.	36.4	32.1	32.0	30.6	26.2	13.7	12.0	10.4
Specific Gravity, 60/60°F.	0.843	0.865	0.865	0.873	0.897	0.974	0.986	0.997
Flash TCC, °F.	82	85	137	105	144	—	—	—
Flash COC, °F.	—	—	—	—	—	190	210	225
Mix. A.P., °F.	84	59	93	61	59	55	54	54
K-B Value, T-105	75	93	68	94	96	108	102	98

AMOCO CHEMICALS CORPORATION
910 South Michigan Avenue,
Chicago 80, Illinois



Borax, tech., anhyd, 99½%, bgs., c.l., works ton 92.00 • —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 7.42 • —
bgs., smaller lots, same basis 100 lbs. 8.67 -10.67
bulk, c.l., works ton 83.00 • —
gran., decahydrate, 99½%, bgs., c.l., works ton 50.00 • —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 5.32 • —
bgs., smaller lots same basis, 100 lbs. 6.57 - 8.57
bulk, c.l., works ton 43.50 • —
gran., pentahydrate, 99½%, bgs., c.l., works ton 64.50 • —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 6.05 • —
gran., pentahydrate, 99½%, bgs., smaller lots, same basis 100 lbs. 7.30 - 9.30
bulk, c.l., works ton 58.00 • —
USP, powd., bgs., c.l., works, ton 54.00 • —
bgs., ton lots, ex whse, New York or Chicago 100 lbs 6.45 • —
bgs., smaller lots, same basis, 100 lbs. 7.70 - 9.70
Bordeaux powder tribasic bgs., c.l., dlvd lb. .24 • —
bgs., l.c.l., same basis lb. .26 • —
Boric acid, tech. anhyd. 99.9% bgs., c.l. works ton 335.00 • —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 19.62 • —
bgs., smaller lots, same basis, 100 lbs. 20.87 -22.87
cryst., 99.9% bgs., c.l., works, ton 163.50 • —
bgs., ton lots ex whse, New York or Chicago 100 lbs. 11.05 • —
bgs., smaller lots, same basis, 100 lbs. 12.30 -14.30
dms., c.l., works ton 188.50 • —
dms., ton lots, ex whse., New York or Chicago, 100 lbs. 12.30 • —
bgs., smaller lots, same basis 100 lbs. 13.05 • —
gran., 99.9% bgs. c.l., works, ton 112.00 • —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 8.47 • —
bgs., smaller lots, same basis, ton 174.25 • —
dms., c.l., works ton 137.00 • —
dms., ton lots, ex whse, New York or Chicago 100lbs. 9.72 • —
dms., smaller lots same basis, 100 lbs. 10.47 • —
bulk, c.l., works ton 106.00 • —
powd., bgs., ton lots, ex whse, New York or Chicago, 100 lbs. 8.85 • —
bgs., smaller lots, same basis, 100 lbs. 10.10 -12.10
dms., smaller lots, same basis 100 lbs. 11.45 • —
USP boric acid $25 per ton higher in bags.
Borneol, cns lb. 2.75 • —
Boron trichloride, CP, 1,800-lb. cyls., works lb. 1.25 • —
100-lb. cyls. works lb. 1.70 • —
Boron trifluoride, gas, cyls, t.l., works lb. .70 • —
cyls., l.t.l., works lb. .70 • —
Brimstone (see Sulfur).
Broenner's acid, bbls. lb. 1.53 • —
Bromine, purif., cs., c.l., t.l., dlvd. E of Rockies lb. .32 • —
cs., l.c.l., same basis lb. .34 • .39
ret. dms., c.l., t.l., dlvd. E. of Rockies lb. .31 • —
ret. dms., l.c.l., same basis lb. .31 • .34
tanks, same basis lb. .21½ • —
Bromochloromethane, dms., c.l., frt. equald lb. .48 • —
dms., l.c.l., same basis lb. .50 • —
tanks, same basis lb. .47 • —
Bromoform, pharmaceutical grade, 100-lb. cbys lb. 1.80 • 1.90
Bromstyrol, bots. lb. 5.35 • 5.70
Brucine, cns. oz. 1.50 • 1.75
Brucine sulfate, NF, cns oz. 1.50 • 1.75
Buchu leaves, bls lb. .75 • .80

BROWN PIGMENTS

Brown pigment quotations are listed individually. For example, prices on Brown, iron oxide, may be found in the I's under iron oxide brown.

Butadiene, refd. cyls., c.l., refy lb. .21 • —
cyls., l.c.l., refy lb. .22 • —
tanks, dlvd. lb. .14½ • —
n-Butyl acetate, ferment, dms., c.l., frt. alld lb. .17 • —
dms., l.c.l., same basis lb. .18½ • —
tanks, same basis lb. .14½ • —
Syn., dms., c.l., dlvd. E lb. .17 • —
dms., l.c.l., same basis lb. .18½ • —
tanks, same basis lb. .14½ • —
sec-Butyl acetate, syn., dms., c.l., dlvd. E lb. .14¾ • —
dms., l.c.l., same basis lb. .16¼ • —
tanks, same basis lb. .12¼ • —
n-Butyl acrylate, dms., c.l. or t.l., straight or mixed frt. alld. E. lb. .42½ • —
dms., l.t.l., same basis lb. .43½ • —
tanks, same basis lb. .40 • —
Prices of n-butyl acrylate are 1c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
n-Butyl alcohol, ferment, dms., c.l., frt. alld. lb. .17½ • —
dms., l.c.l., frt. alld lb. .19 • —
tanks, frt. alld lb. .15 • —
n-Butyl alcohol, syn., dms., c.l., dlvd. lb. .17½ • —
dms., l.c.l., frt. alld lb. .19 • —
tanks, dlvd. lb. .15 • —
Sec-synthetic, dms., c.l., dlvd. lb. .15 • —
dms., l.c.l., dlvd lb. .16½ • —
tanks, dlvd lb. .12½ • —
Tert-synthetic, dms., c.l., frt. alld, dlvd. E lb. .15 • —
dms, l.c.l. same basis lb. .16½ • —
tanks, same basis lb. .12½ • —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride, dms., c.l., works lb. .37½ • —
dms., l.c.l., works lb. .38¼ • —
n-Butyl ether dms., c.l., works lb. .35¼ • —
dms., l.c.l., works lb. .36 • —
tanks, works lb. .33¼ • —
Butyl lactate dms., c.l., frt. alld. E. of Rockies lb. .42½ • —
dms., l.c.l., same basis lb. .43½ • —
tanks, same basis lb. .40 • —
Butyl laurate dms., works lb. .37½ • —
Butyl methacrylate, dms., c.l., t.l., works lb. .55 • —
dms., l.c.l., works lb. .55½ • —
Butyl oleate, refd., dms., l.c.l., works lb. .32 • —
Butyl phenylacetate, dms. lb. 4.50 • 4.60
Butyl phthalate (see Dibutyl phthalate).
Butyl stearate, dms., c.l., frt. alld. E. of Mississippi lb. .27¼ • —
dms, l.c.l. same basis lb. .28¼ • —
Butylamine (see Mono-, Di- and Tributylamine).

6-tert-Butyl-m-cresol (see mono-tert-m-cresol).
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).
p-tert-Butylphenol, bgs., c.l., dlvd. lb. .27½ • —
bgs., l.c.l., works lb. .28½ • —
Butyraldehyde, dms., c.l., dlvd lb. .22 • —
dms., l.c.l., dlvd. lb. .23½ • —
tanks, dlvd. lb. .19½ • —
Butyric acid, 99%, dms., c.l., frt. equald lb. .34 • —
dms., l.c.l., same basis lb. .34½ • —
tanks, same basis lb. .32½ • —
Butyric ether (see Ethyl butyrate).

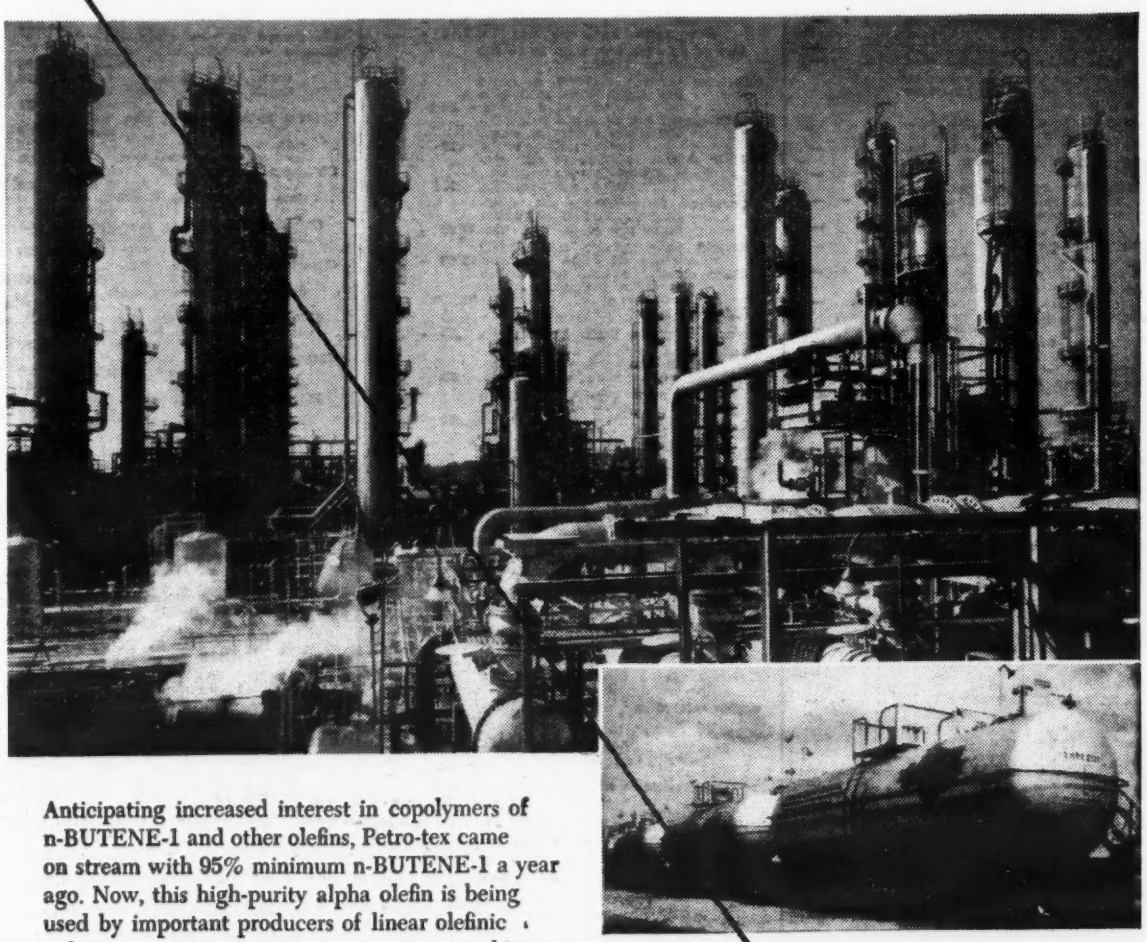
C

Cacao butter (see Cocoa butter)
Cadmium CP red, dark shade, bbls., frt. alld. E. of Rockies lb. 5.45 • —
Light shade, bbls same basis lb. 4.55 • —
Medium shade, bbls., same basis, lb. 5.20 • —
Medium light shade bbls. same basis lb. 4.80 • —
Orange-red shade, bbls., same basis lb. 4.20 • —
Yellow all shades, bbls. frt alld. E. of Rockies lb. 3.75 • —
Cadmium iodide 25-lb fib dms lb 6.75 7.00
Cadmium metal ingots or sticks, ton lots, cs., dlvd lb. 1.30 • —
Cadmium-mercury lithopone orange, deep shade, bbls., frt. alld E. of Rockies lb 1.58 • —
Cadmium-mercury lithopone red, dark shade, bbls., same basis lb. 1.88 • —
Red, light shade, bbls. same basis, lb. 1.65 • —
Red, medium shade, bbls., same basis lb. 1.80 • —
Cadmium-mercury lithopone red, medium light shade, bbls., same basis lb. 1.73 • —
Red, maroon shade bbls., same basis lb. 1.96 • —
Cadmium-selenide lithopone maroon, bbls., frt. alld E. of Rockies, lb. 2.72 • —
Maroon, dark shade bbls. same basis lb. 2.74 • —
Orange, bbls., same basis lb. 1.54 • —
Cadmium-selenide lithopone red, orange-red shade, bbls., same basis lb. 1.68 • —
Red, dark shade, bbls. same basis, lb. 2.52 • —
Red, light shade, bbls. same basis lb. 1.84 • —
Red, medium-light shade bbls., same basis lb. 1.96 • —
Red, medium shade bbls. same basis lb. 2.19 • —
Cadmium-selenide, lithopone yellow, all shades, bbls. frt alld. E. of Rockies lb. 1.15 • —
Caffeine, NF, citrated, ums. 100-lb. lots or more lb 2.70 • —
Syn., cryst., anhyd., dms., 100-lb. lots or more lb 2.10 • —
cryst., hydrous, dms., 100-lb. lots or more lb. 1.96 • —
USP, nat., cryst., anhyd., dms., 100-lb lots or more lb. 2.10 • —
cryst., hydrous dms., 100-lb. lots or more lb. 1.96 • —
Cajuput oil, native, cns lb 1.75 2.55
Redist., USP, cns lb. 1.90 2.10

Calamine, USP, dms. lb. .34 —
Calamus oil, bots lb 12.00 -20.00
Calciferol cryst. 10-kilo or more lots, works gram .54 • —
1-10 kilo lots gram .55 • —
Calciferol in edible oil (see Viosterol).
Calcium p-aminosalicylate trihydrate fib dms. 100 lbs. or more frt adjusted lb 3.10 • —
Calcium arsenate dealers bgs., c.l., frt alld lb. .09 • 09¼
bgs. l.c.l. same basis lb. 10 10½
Calcium bromide, NF, jars, 100 lbs. or more lb. .97 • —
Calcium carbide standard generator size, 600-lb dms. c.l. dlvd ton 149.00 • —
Calcium carbonate, nat., dry grd., air floated, 325 mesh, bgs., c.l., works ton 10.50 • —
chalk whiting 325 mesh, bgs., c.l. works ton 32.00 -34.00
water-grd., ½ to 10 microns, bgs., c.l., works ton 30.00 —
10 to 20 microns, bgs., c.l., works ton 17.00 -18.00
Precip., dense, bgs. c.l., works ton 30.00 -35.00
bgs., l.c.l., works ton 45.00 -50.00
medium, bgs. c.l., works ton 38.00 —
bgs., l.c.l., works ton 48.00 —
Calcium carbonate, surface treated, bgs., c.l., works ton 40.00 -42.00
bgs., l.c.l., works ton 55.00 -57.00
ultrafine, bgs., c.l., works ton 117.50 167.50
bgs., l.c.l., works ton 137.50 -187.50

second successful year of substantial commercial output

n-BUTENE-1 (95% minimum)



Anticipating increased interest in copolymers of n-BUTENE-1 and other olefins, Petro-tex came on stream with 95% minimum n-BUTENE-1 a year ago. Now, this high-purity alpha olefin is being used by important producers of linear olefinic polymers to improve resistance to stress cracking and to reduce low-temperature brittleness.

Highly-reactive Petro-tex n-BUTENE-1 also undergoes a wide range of oxidation, hydration, alkalation and oxo-process reactions with interesting petrochemical possibilities.

We invite inquires for technical data, specifications, price and delivery quotations on n-BUTENE-1, as well as . . .

n-BUTENE-2 (95% minimum) ISOBUTYLENE (99+% pure)

BUTADIENE DIISOBUTYLENE TRIISOBUTYLENE

Petro-Tex

PETRO-TEX CHEMICAL CORPORATION

HOUSTON 1, TEXAS

JOINTLY OWNED BY
FOOD MACHINERY AND CHEMICAL CORPORATION
TENNESSEE GAS TRANSMISSION COMPANY

Calcium chloride, flake, 77-80%, paper bgs. c.l., works, frt. equald ton 31.00 - —
Conc., flake or pellet, 94-97%, paper bgs. c.l., works frt. equald ton 37.80 - —
Liquor, 40% tanks frt equald ton 12.50 - —
Powd., 77% min., paper bgs., c.l., works, frt. equald ton 37.00 - —
Purif., gran., dms lb .27 - —
Solid 73-75% dms. c.l., frt equald ton 29.50 —
dms. l.c.l. works frt equald ton 36.00 - 73.00
USP gran. dms. lb .32 —
Calcium chromate bgs., dlvd lb .37 - —
Calcium cyanide dms., c.l. dlvd E. of Rockies lb .20 - —
dms., l.c.l., same basis lb .24 - .55
Calcium cyclamate 100-lb dms lb 1.95 —
Calcium gluconate, USP, AA grade, 150-lb. dm., ton lb. .73½- —
USP, powd., 150-lb. dm, ton lb. .66½- —
Calcium hydride lump dms. works lb 2.20 3.00
Calcium hypochlorite, high test, 45-lb cs., dlvd E of Rockies cs 22.95 25.10
100-lb dms., same basis dm 30.80 34.50
Calcium hypophosphite dms., 1,000-lb lots lb 1.28 - —
Calcium iodide jars lb 4.52 - —
Calcium lactate, NF dms. 10,000-lb. lots or more, works lb .36 40
dms. smaller lots, works lb .41 - .48
Calcium mandelate, USP, 150-lb. dm., works lb. 3.25 - —
Calcium naphthenate, liq., 4% Ca., dms. frt equald lb .30 - —
Calcium pantothenate, USP, 1-kilo or more, kilo. 35.00 - —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate)
Calcium phenolsulfonate dms lb. 1.24 1.25
Calcium phosphate dibasic, USP, bgs. c.l. frt equald 100 lbs 8.25 - —
Dibasic, feed grade, 18½% P, bgs., c.l., t.l., frt. equald ton 86.00 - —
bgs. c.l. t.l. f.o.b. Texas City works ton 80.50 - —
bgs., l.c.l., frt. equald ton 96.00 - —
21% P., bgs., c.l. t.l., frt equald ton 97.65 - —
bgs., l.c.l., frt. equald ton 107.65 - —
Prices of calcium phosphate dibasic in bulk $3 per ton less than bg., c.l. prices
Calcium phosphate monobasic, bgs., 10,000-lb. lots, frt. equald, 100 lbs 7.45 - —
bgs. smaller lots same basis, 100 lbs. 7.95 - —
Tribasic NF, precip., bgs., c.l., works, frt. equald 100 lbs. 9.25 - —
bgs. l.c.l. frt. equald, 100 lbs. 10.00 - —
Calcium phytate bgs., 50 lbs. or more, f.o.b. warehouse N. Y. lb .39 - —
Calcium resinate precip. dms ton lots, frt. alld. works lb .36¼- —
Calcium silicate hydrated bgs., c.l., works lb .06 - —
bgs. l.c.l., works lb .06½- —
Calcium silicate, paint grade (see Wollastonite)
Calcium stearate ctns. c.l. lb .39 - —
ctns. l.c.l. lb .40 - .44
Calcium sulfate (see Gypsum)
Calomel NF X powd 100 lb dms. lb 5.42 - —
Camphene 46° m.p. dms incl. c.l., works lb .15 —
dms. incl., l.c.l. same basis lb .16½ —
tanks same basis lb .12½- —
Camphene, chlorinated 67-69% (see Toxaphene)
Camphor, monobromated, NF, dms., kgs lb 3.63 3.70
Nat., USP, powd., cs., 100-lb. lots, lb. .60 - .65
tablets, 1-oz. cs lb 85 90
USP, gran., bbls., 2,000-lb. lots, lb. .59 - —
Syn. USP gran., powd., bbls., 1,000-lb lots lb .60 - —
bbls. smaller lots lb .61 - —
tablets, ctns., 1,000-lb. lots, lb. .85 - —
ctns 500-lb lots lb 86 - —
ctns smaller lots lb .87 - —
Syn., tech., 1 bbl. or more lb. .48 - —
Camphor oil, sassafrassy dms. lb .35 .55
White dms lb .26 .50
Cananga oil native cns lb 6.50 7.00
Rectified, cns. lb 7.25 - 10.00
Candelilla wax, crude, bgs. lb. .58 Nom.
Refd., bgs lb. .57 .59
Powdered Candelilla wax 20 to 100 mesh, 8c higher
Cantharides, Chinese, cs lb 1.25 - —
powd. bxs. lb 1.75 - —
Russian, bgs. lb 2.25 - —
powd., bxs. lb 2.75 - —
Capric acid, dms lb .35½ .38
tanks lb. .33 - .34½
Capryl alcohol, 85% dms., c.l., and t.l., works lb .19 —
dms., t.t.l. same basis lb. .19½ —
tanks, frt equald lb. .16½ —
Sec 92-99% dms., c.l. lb .22 —
dms., l.c.l. lb .23 —
tanks lb .19½ —
Caprylic acid, dms lb. .35½ .38
tanks lb. .33 - —
Capsicum (see Pepper red)
Capsicum oil (see Capsicum oleoresin).
Capsicum oleoresin, NF, from dom pepper, dms lb 4.00 - —
NF, from African pepper, dms. lb 4.50 - —
Caraway oil, dms lb 3.00 - 3.25
Caraway seed, Danish, bgs lb .12¼ —
Dutch, bgs. lb .13 - —
Polish, bgs. lb .12 - —
Carbazole, 97%, bbls., ton lots, works lb 1.05 - —
Carbon black, channel, rubber beads, bulk, c.l., works lb .07¼ —
bgs., c.l., works lb .07¾ —
bgs., l.c.l., works lb .15½ —
Carbon black, furnace, fast extruding, bgs., c.l., works lb .06¾ —
ctns l.c.l., whse lb .13½ —
high abrasion, bulk, c.l., works, lb. .07¼ —
bgs., c.l. works lb .07¾ —
bgs., l.c.l., dlvd. or whse lb .14½ —
high modulus, bgs., c.l., works, lb .06¼ —
ctns., l.c.l., whse. lb .13 - —
semi-reinforcing, bgs., c.l., works, lb. 0534 —
bgs., ctns., l.c.l., whse. lb .12½ —
Carbon black, pigment, high color beads, ctns., c.l., works lb .72 - —
ctns., l.c.l., dlvd. or whse lb .79 - —
medium color, uncompressed, bgs., c.l., works lb .13½ —
bgs., l.c.l., dlvd. or whse lb .22 - —

Carbon dioxide, indust., wholesale, bulk, 30,000-2,999,999 lbs., dlvd. Metropolitan areas, E. ton 60.00 - 115.00
bulk, 3,000,000 lbs. of more, dlvd., Metropolitan areas, E. ton 55.00 - —
Solid, bulk, wholesale, works ton 85.00 - —
Carbon disulfide, 55-gal. dms., c.l., works, frt equald to competitive points lb. .071 - —
55-gal. dms., l.c.l., same basis lb. .086 .091
5-gal. dms. 30 dms. to c.l., same basis lb. .131 - —
5-gal. dms., less than 30 dms., same basis lb. .161 - —
tanks, dlvd. lb. .0545- —
Carbon tetrachloride, CP, consumers, dms., c.l., frt. alld lb. .12¾- —
dms., l.c.l., frt. alld lb. .15¼- —
Tech., consumers, dms., c.l., t.l., frt. alld lb. .11¾- —
dms., l.c.l., t.l.l., frt. alld lb. .14¼ —
tanks, frt. alld lb. .10¾- .11¼
Carboxymethyl cellulose (see CMC).
Carbromal, NF, dms., 100-lb. lots, works lb 4.00 4.25
dms smaller lots, works lb 4.10 4.75
Cardamom oil, NF, bots. lb. 40.00 - 47.50
Cardamom seed, bleached "A" lb 2.95 - —
Bleached "B" lb 2.95 - —
Decorticated Alleppey, cs lb 2.85 - —
Guatemala, cs. lb 2.85 - —
Green, Alleppey bgs lb. 2.00 - —
Ceylon, bgs. lb. 2.00 - —
Carmine No. 40, NF, bulk, 100-lb lots or more, dlvd. lb. 16.80 - —
bulk, smaller lots, dlvd. lb. 16.90 - 17.30
Carnauba wax, chalky, bgs., ton lots lb. .73 - .75
North country, No. 2, crude, bgs., ton lots lb. .84 - .85
refd., pure, ton lots lb. .94 - .95
North country, No. 3, Ceara, crude, bgs., ton lots lb. .76 - .77
Ceara, refd., pure, bgs., ton lots lb. .85 - .86
Carnauba wax, North country, No. 3, Parnahyba, crude, bgs., ton lots lb. .78 - .80
Parnahyba, refd., pure, bgs., ton lots lb. 1.15 - 1.17
Yellow, No. 1, Ceara, bgs., ton lots lb. 1.14 - 1.16
Parnahyba, bgs., ton lots lb. 1.16 - 1.18
Powdered carnauba wax, 20 to 100 mesh, 8c. higher
Carotene tech., 1,350,000 A units per gram, tins 5-10 kilo lots, dlvd gram .24½- —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units .12 - —
USP microcrystalline in oil, 400,000 A units per gram, dms., dlvd million units .174 - —
b-Carotene in vegetable oil, semi-solid suspension, 400,000 A units per gram cns kilo. 57.60 - —
Liquid in vegetable oil, 500,000 A units per gram cns kilo. 72.00 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram., cns. kilo. 240.00 - —
Carvol, bots. lb 5.00 5.40
Cascara sagrada, bark, bulk lb. .34 - .36
Casein, dom., edible, acid precip., 30 mesh., bgs., 10,000-lb. lots or more, works lb. .56 - —
edible, acid, precip., 80 mesh, bgs., 10,000-lb lots or more, works lb. .64 - —
Imp., inedible, acid-precip., grd., Argentine, bgs., c.l., ex-dock, Eastern seaports lb. .21¾- .22¼
New Zealand, bgs., c.l., same basis lb. .25 - —
Cashewnut shell oil, treated dms., c.l. (Newark N. J. lb 22 - —
dms. ton lots, same basis lb 23 - —
dms., dm lots, same basis lb. 25 - —
Cassella acid, dms. frt alld., 100% basis lb 1.44 1.75
Cassia, Padang, "A," bls lb .30 - —
"B," bls. lb 29 - —
"C," bls. lb 28 - —
Korintje "A" bls. lb .29 - —
"B," bls. lb .28½ —
"C," bls. lb .27½- —
Cassia oil (see Cinnamon leaf oil, USP)
Castor oil, dom., blown, dms., c.l. lb. .2550- —
dms., l.c.l. lb. .2650- —
dehydrated, bodied, dms., c.l. lb. .2700- —
dms., l.c.l. lb. .2850- —
tanks lb. .2500- —
dehydrated, unbodied, dms., c.l lb. .2500- —
dms., l.c.l. lb .2560- —
tanks lb .2360- —
hydrogenated, bgs., c.l. lb. .2450- —
bgs., ton lots lb. .2850- —
bgs., l.c.l. dlvd lb. .3050- —
No. 1, dms., c.l. lb. .2150- —
dms., l.c.l. lb. .2250- —
tanks lb 1950- —
No. 3, tech., dms., c.l. lb. .2125- —
dms., l.c.l. lb 2325- —
tanks lb. .1925- —
refd., deod., dms., c.l. lb. .2650- —
dms., l.c.l. lb. .2750- —
USP, dms., c.l. lb. .2350- —
dms., l.c.l. lb. .2450- —
tanks lb. .2150- —
Imported, No. 1, Braz., tanks lb. .17½- —
Castor oil, sulfonated, 50% dms., works lb .15 - .15¼
75% dms., works lb .19 - .19½
Castor oil acids, dehydrated, dms. lb. .44¼ .46¼
Split dms lb .37¼ .38¼
Castor pomace, bgs. c.l. works ton 35.00 - —
Castoreum, nat, cns. lb 5.25 - —
Syn. cns. lb 9.00 - —
Catechol, CP, crvst., fib., dms., works lb. 2 17½- —
Resub., dms. works lb 4 29½- —
Catnip leaves, Southern, bls lb. Nom.
Caustic potash (see Potash caustic).
Caustic soda (see Soda, caustic).
Cedarleaf oil USP XIII cns. dms. lb. 2.50 - 3.10
Cedarwood oil, cns., dms lb. .62 - .70
Celery seed, French, bgs lb .33 - —
Indian, bgs lb. .19 - —
Cellulose acetate, flake, powd., bgs. ctns., 100-lb lots or more dlvd. E. lb. .35 - .45
Cellulose acetate butyrate, powd., 17% butyryl content, bgs., dlvd E lb. .545 .555
27% butyryl content, bgs. dlvd. E lb. .595 .605
38% butyryl content, bgs. dlvd. E lb. .545 - .555

Cellulose acetate-butyrate, powd., 38% butyryl content half-second, bgs., dlvd. E lb. .545 - .555
50% butyryl content, bgs. dlvd., E lb. .585 - .595
Cellulose gum, methyl (see Methyl Cellulose)
Cellulose gum, pure high vis. bgs., 23,000-lb lots or more works, frt alld lb. .57 - —
bgs., smaller lots, same basis lb. .59 - —
Cerium chloride (see Rare Earth Chloride).
Cerium chloride 46% dms. dlvd lb .25 - —
Cerium hydrate 74% CeO fib dms., 100-lb lots or more lb 1.40 - —
77% CeO fib dms 100-lb lots or more lb 1.74 - —
Cerium oxalate (see Rare earth oxalate).
Cerium oxide, optical grade, bgs., 50-lb lots or more dlvd lb 1.85 - 1.90
bgs., smaller lots, dlvd lb. 2.15 - —
Cetyl alcohol NF fib cns. c.l., t.l., dlvd. E lb. .41½- —
fib. cns., l.c.l., same basis lb. .43½- —
tanks, same basis lb .39 - —
NF, special, fib. cns., c.l., t.l., dlvd.E. lb. .48½- —
fib. cns., l.c.l. same basis lb .50½- —
tanks, same basis lb. .46 - —
Chalk (see Calcium carbonate)
Chamomile flowers, Hungarian, bls lb. 1.25 - —
Roman, cs. lb. 1.50 - 1.75
Chamomile oil, blue Hungarian, bots lb. 350.00 - —
Charcoal, activated, NF fib dms., c.l., works lb .25 - .32
fib dms., 5-ton lots, works lb. .26½- .32½
fib. dms. smaller lots works lb .27 - .50
Charcoal, black (see Charcoal, activated).
Charcoal, bone (see Bone black).
Charcoal hardwood lump bulk, c.l., f.o.b plant ton 55.00 - —
briquets, bulk, c.l., f.o.b plant ton 78.00 - 80.00
5-lb. paper bgs., c.l., same basis ton 106.00 - —
25-lb. paper bgs. c.l., f.o.b plant ton 87.00 - —
40-lb. paper bgs c.l., same basis ton 84.00 - —
Chenopodium oil NF cns lb 4.15 - 5.00
Chicago acid paste, bbls frt. alld. lb. 3.21 - —
Chinawood oil (see Tung oil).
Chloral, tech 94% min. dms., c.l., works lb. .23 - —
dms., l.c.l., works lb. .24 - —
tanks multiple units, 5 cars, works lb. .21 - —
Chloral hydrate USP jars, 1,000-lb lots lb 1.00 - —
jars, 500-lb lots lb 1.03 - —
jars, 100-lb lots or less lb. 1.05 - —
Chlordan, agricultural dms., c.l., frt alld lb. .65 - —
dms l.c.l 5,000 to 10,000-lb lots, frt alld lb. .68 - —
Clarified dms., c.l., frt. alld—lb. .69 - —
dms., l.c.l., 5,000 10,000-lb lots, frt alld lb. .70 - —
Chlorinated paraffin, 42% dms., c.l frt alld lb. .16¼- —
dms l.c.l. 10 dms or more, same basis lb. .17¼- —
70%, dms., c.l., same basis lb. .18½- —
dms l.c.l 10 dms or more, same basis lb. .19½- —
Chlorinated rubber, 5, 10, 20 cps., ctns., c.l., works lb. .60 - —
ctns., l.c.l., works lb. .61 - —
125, 1,000 cps., ctns., c.l., works. lb. .70 - —
ctns., l.c.l., works lb. .71 - —
Chlorine, liq., cyls c.l., works, frt equald lb. .11 - —
cyls., l.c.l. Metropolitan area lb. .12½- .13¾
tanks, single units, works, frt. equald 100 lbs. 3.15 - —
tanks, multiple units, 5 cars, works, frt equald 100 lbs. 4.05 - —
tanks, multiple units 4 cars, same basis 100 lbs 4.25 - —
tanks, multiple units, 2 cars, same basis 100 lbs. 5.25 - 5.75
tanks, multiple units, 1 car, same basis 100 lbs. 6.25 - 7.25
Chloroacetic acid, mono, flake, 99%, dms. c.l lb. .23½- .25½
dms., l.c.l. lb. .24½- —
tech. flake, 96-97% dms., c.l., frt equald lb. .19 - —
dms. l.c.l. frt equald lb. .20 - —
2-Chloro-4-aminotoluene tech., liq., dms frt alld lb 1.03 - —
4-Chloro-2-aminotoluene fused, bbls. lb. 1.38 - —
6-Chloro-2-aminotoluene tech., liq., dms. frt alld lb. .66 - —
m-Chloroaniline, dms. c.l. frt alld, lb. .75 - —
dms., l.c.l., same basis lb. .77 - —
tanks, same basis lb. .73 - —
o-Chloroaniline, dms., c.l., frt. alld, lb. .52 - —
dms., l.c.l., same basis lb. .54 - —
tanks, same basis lb. .50 - —
p-Chloroaniline, dms. c.l. frt. alld, lb. .77 - —
dms., l.c.l. same basis lb. .79 - —
o-Chlorobenzaldehyde, dms., t.l., works, dlvd to N.Y. Metropolitan area lb. 1.05 - —
dms., t.t.l., same basis lb. 1.20 - —
p-Chlorobenzaldehyde, dms., l.c.l., works, dlvd to N. Y. Metropolitan area lb. 1.95 - —
o-Chlorobenzoic acid, fib dms., t.t., works lb. 1.10 - —
fib. dms., smaller lots works lb. 1.25 - —
p-Chlorobenzoic acid, fib. dms., 2,000-lbs. or more, works. lb. 2.25 - —
fib. dms., less than 2,000-lbs., same basis lb. 2.30 - —
Chloroform, tech., dms., c.l., dlvd. E lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .17 - —
USP, dms., c.l., dlvd lb. .27 - —
dms., l.c.l., dlvd lb. .30 - —
tanks, minimum 4,000 gals. dlvd. lb. .25 - —
2-Chloro-4-nitroaniline, paste, dlvd. E. 100% basis lb. .81 - —
Powd. dlvd. & 100% basis lb. .86½- —
4-Chloro-2-nitroaniline, powd. dlvd. E lb. .80½- —
4-Chloro-2-nitrophenol, tech., paste, dms. frt alld lb. .75 - —
4-Chloro-2-nitrotoluene tech., solid, dms., frt alld lb. .99 - —
6-Chloro-2-nitrotoluene, tech., solid, dms. frt alld lb. .17 - —
o-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms., l.c.l., same basis lb. .38 - —
p-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms. l.c.l., same basis lb. .38 - —
Chloropicrin, comi. cyls., 180 lbs., frt alld lb. 1.07 - —
cyls. 100 lbs. same basis lb. 1.08 - —
cyls., 50 lbs., same basis lb. 1.14 - —

Chlorosulfonic acid, dms., c.l., frt. equald lb. .0465- —
dms., l.c.l., frt. equald lb. .0515- —
tanks, frt. equald lb. .0415- —
Chlorosulfonic acid, in stainless steel dms. ½c. per lb higher
o-Chlorotoluene, tech., dms., t.l., works lb. .37 - —
dms., l.c.l., l.t.l., same basis lb .38 - —
Choline bitartrate, fib dms. frt. adjusted kilo. 2.75 - 3.00
Choline chloride fib. dms., frt. adjusted kilo. 2.75 - 3.00
Choline dihydrogen citrate, fib. dms., frt. adjusted kilo. 2.75 - 3.00
Chrome green, CP dark, tight medium blue content 1-15%, bbls., dlvd E. of Rockies lb. .40 - .42
blue content 16-30%, bbls., same basis lb. .40 - .42
blue content 31-45%, bbls., same basis lb. .41 - .43
blue content 45-49%, bbls., same basis lb. .44 - .46
Reduced color, 25% lb. .19 - .20
Chrome green prices 1c. higher W of Rockies.
Chrome orange CP bbls., dlvd. E. of Rockies lb. .35 - —
Chrome orange prices 1c higher W of Rockies
Chrome yellow CP bbls., dlvd E. of Rockies lb. .35 - —
Chrome yellow price 1c higher W of Rockies
Chromic acid, 99¾%, dms., c.l., works, frt. equald lb. .29½ —
dms. l.c.l. dlvd. N.Y. Metropolitan area lb. .30 .31
Chromic acid, NF (see Chromium trioxide)
Chromium acetate, soln., 7½%, dms. 500-2,000-lb lots, works. lb. .10 - —
Chromium oxide, hydrated, bbls., fib dms. c.l. frt alld lb 1.20 - —
Pure, bgs., c.l., frt alld lb. 44½- —
bgs. l.c.l. same basis lb. 45¼- —
Chromium trioxide NF bots lb 1.15 —
Cinchona bark, NF red broken, bgs lb. .25 - —
NF yellow broken bgs. lb. .35 - .40
Chromium fluoride bbls. works lb .51 - .52
Cinnamic acid refd bots lb 2.50 3.50
Cinnamic alcohol bots. lb 1.75 - 2.20
Cinnamic aldehyde dms lb .92 1.25
Cinnamon Ceylon, No. 2, bgs. lb. .69 - —
Ceylon No "0000," bgs lb. .78 - —
Cinnamon bark oil bots lb 36.00 - 70.00
Cinnamon leaf oil, crude, dms lb 1.35 2.00
USP (Cassia), cns., dms lb 8.50 - 13.50
Citral, CP, bots. lb. 3.50 - 4.00
Extra, bots. lb. 3.95 - 5.55
Citric acid USP anhyd., fine gran., bgs., dms., c.l lb. .29½- .30
bgs. dms. 10,000-lb lots, 1 shipt lb. .30 - .30¼
bgs. dms., smaller lots lb. .30½- .31
USP, hydrous, fine gran., bgs., dms., c.l lb. .27½- .28
bgs., dms., 10,000-lb lots, 1 shipt lb. .28 - .28¼
bgs., dms., smaller lots lb. .29 - .29¼
Powdered citric acid ½c. per lb. higher
Citronella oil Ceylon, dms. lb. .75 1.05
Java-type, dms. lb. .80 - 1.20
Citronellal, bots., dms lb 1.60 - 2.10
Citronellol, bots., dms lb. 2.30 - 3.70
Civet, artif. bots. lb 13.75 -15.00
Nat. bots oz. 8.50 -15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn ton 17.50 -21.50
crushed shed moisture, bulk, c.l. Tenn ton 8.00 -11.00
Clay, ball, imp., airfloated, bgs. c.l., Atl. port net-ton 42.00 -45.75
lump bulk, Atl. port net-ton 29.50 -35.75
Clay, China, dom., dry-grd. airfloated, 99% 325 mesh, Georgia, bgs. c.l., works ton 10.00 -12.00
Georgia, bgs. l.c.l. works. ton 15.50 - —
Clay, China, dom., airfloated, 99%, 300 mesh bgs., c.l., Georgia, works ton 13.50 -14.50
bgs. l.c.l. ex-whse ton 35.00 -36.00
Clay, China, imp., white, lump, bulk, c.l., ex dock, Philadelphia, Portland, Me long-ton 20.00 -35.00
white, powd., bgs., c.l., ex dock, net-ton 50.00 —
bgs. l.c.l. ex whse net-ton 60.00 -70.00
Cleaner's naphtha, petroleum, 140°F, flash, tanks, east coast, New Jersey and New York gal. 18 —
tanks, group 3 gal. .13875- —
tanks, Houston, Tex. gal. .19 - —
tankwagon, Newark gal. .19 - —
New York gal. .19 - —
Philadelphia gal. .19½- —
Cleve's acid, tech., mixed, solid, dms., frt. alld lb. 1.05 - —
Cleve's acid, 1,6, tech. solid, dms., frt. alld lb. .77 - —
1,7, tech., dms., frt. alld. lb. 2.20 - —
Cloves, Madagascar, bgs. lb. .40½- —
Zanzibar, bgs. lb. .42½- —
Clove bud oil, USP, dms lb. 2.70 3.60
Clove leaf oil, crude, dms lb. 1.30 - 1.80
CMC, crude, 96.4% low or medium vis. bgs. or fib. dms., 23,000 lbs., dlvd. E., 100% basis lb. .41½- —
96.4% low or medium vis., bgs. or fib. dms., 23,000 lbs. dlvd. E., 100% basis lb. .43½- —
65%, low or medium vis., bgs., or fib. dms., c.l., dlvd. E., 100% basis lb. .41½- —
bgs. or fib. dms., l.c.l., dlvd. E., 100% basis lb. .43½- —
CMC, purif. high vis. (see Cellulose gum).
CMC, standard, low or medium vis., bgs., 23,000 lbs., works, frt. alld lb. .57 - —
bgs. smaller lots same basis, lb. .59 - —
CMC prices W. of the Rockies are 2c. per lb. lower and are on a works basis.
Coaltar, crude, resale for solns., tanks, works gal. .17 - —
Coaltar, refd., resale, indust., dms., c.l., ex whse gal. .35 - —
dms., l.c.l., ex whse. gal. .39 - —
tanks works gal. .20½- —
Coaltar pitch, aluminum, bulk, works ton 44.00 - —
Carbon and indust., bulk, works ton 44.00 - —
Core, bulk, works ton 40.50 - —
Fiber bulk, works ton 48.00 - —
Roofing, 140-155°F., Federal Specification RP-381 Type 1, tanks, works ton 41.00 - —
Cobalt acetate, 23.7% Co., dms. dlvd lb. 1.04 - —
Cobalt blue genuine, 250 lb. bbls., dlvd. E. of Rockies lb 4.90 - —
Cobalt blue prices 1c. higher W. of Rockies.
Cobalt blue, imitation (see Ultramarine blue).
Cobalt carbonate, 48% Co., powd., bgs., dlvd lb. 1.45 - —
Cobalt chloride, 24.2% Co., dms., dlvd lb. .99 - —
Cobalt hydrate, 60-61% Co., dms., dlvd lb. 2.08 - —

National Aniline

HEADQUARTERS FOR RESIN CHEMICALS

We can serve you *better* because we have *more to serve you with!*

National produces a greater volume of a longer line of dibasic acids and anhydrides, cycloaliphatic solvents and diisocyanates than any other supplier of resin chemicals! Multi-plant production assures continuity of supply.

Get our specifications, technical data and prices on the products listed here.

MALEIC ANHYDRIDE
Tablets, Rods or Molten
Comprehensive 58-page Technical Manual on Maleic Anhydride and 12-page booklet on Molten Maleic Anhydride available.

FUMARIC ACID
99.6% pure and free-flowing. Absence of color makes it extremely desirable for resins and plasticizers.

PHTHALIC ANHYDRIDE
Molten and Flakes
Mixed car and truckloads offered with Maleic Anhydride, Adipic and Fumaric Acid and other National Resin Chemicals.

NADONE® – Cyclohexanone
Fully integrated production. Minimum purity 99.7%. Excellent solvent and intermediate for high-quality, light-colored resins. Technical Bulletin I-19 available on request.

ADIPIC ACID
99.8% minimum purity. Light in color, low in iron. Ask for Technical Bulletin I-12R.

NAXOL® – Cyclohexanol
Two types immediately available: NAXOL (100% material) and NAXOL D (freezing point depressed). Write for Technical Bulletin I-20.

Samples and Data Also Available on:
Aniline • ε-Caprolactam • Hexahydro Phthalic Anhydride
Tetrahydro Phthalic Anhydride • Meta-Phenylenediamine
Succinic Acid • Succinic Anhydride • Nadic® Anhydride
Malic Acid • Dodecenylsuccinic Anhydride
Nadic® Methyl Anhydride

plus a comprehensive line of
NATIONAL PLASTIC AND RESIN COLORANTS

Allied Chemical

NATIONAL ANILINE DIVISION
40 Rector Street, New York 6, N. Y.

Atlanta Boston Charlotte Chicago Greensboro Los Angeles
Philadelphia Portland, Ore. Providence San Francisco
In Canada: ALLIED CHEMICAL CANADA, LTD., 100 North Queen St., Toronto 18
Distributors throughout the world. For information:
ALLIED CHEMICAL INTERNATIONAL • 40 Rector St., New York 6, N. Y.

And for URETHANES...
NACCONATE® – Diisocyanates

NACCONATE 80
Isomeric mixture of approximately 80% of 2,4-tolylene diisocyanate and 20% of 2,6-tolylene diisocyanate.

NACCONATE 100
2,4-tolylene diisocyanate.

NACCONATE 65
Isomeric mixture of approximately 65% of 2,4-tolylene diisocyanate and 35% of 2,6-tolylene diisocyanate.

NACCONATE 300
Diphenylmethane 4,4'-diisocyanate (MDI)

Cobalt Linoleate—Cyanamide

Cobalt linoleate, fused 8½% Co., dms	lb.	71½-	—
Liq. 6% Co. dms.	lb.	57½-	—
Cobalt metal, 97.99%, dms., f.o.b. carrier	lb	1.75	—
Cobalt naphthenate, liq. 6% Co., dms. dlvd	lb.	48¾-	—
Cobalt nitrate, 20.1% Co. bbls. dlvd.	lb.	.80	—
Cobalt oxide, black, ceramic grade, 72½-73½% Co., kgs., dlvd. E. of Mississippi R	lb.	1.33	—
70-71% Co. kgs same basis	lb	1.29	—
Cobalt oxide prices W. of Mississippi R per pound higher			3c.
Cobalt phosphate, powd. 32.1% Co., dms., dlvd	lb	1.35	—
Cobalt resinate, fused, 3% Co., dms.	lb.	29½-	—
Cobalt sulfate, cryst. 21% Co., dms. dlvd	lb.	.64	—
Monohydrated, 33% Co., dms., dlvd	lb.	1.09	—
Cobalt tallate, 6% Co., dms., dlvd.	lb.	.44	—
Cocaine, USP, cns., 100-oz. lots	oz	17.80	—
Cocaine hydrochloride, cns., 100-oz. lots	oz.	13.75	—
Cocillana bark, bls.	lb.	.20	.22
Cocoa butter, bgs.	lb.	.63	.68
Coconut oil, crude, tanks, New York.	lb.	.18½-	—
tanks, Pac. coast	lb.	.16½-	—
Refd., deodorized, dms.	lb.	.26	.27
Coconut oil acids, dist., dms.	lb.	.30½-	.33
tanks	lb.	.28	—
Double dist. (stripped), dms.	lb.	.31½-	.34
tanks	lb.	.29	—
Cod oil, dms., spot	lb.	.08¼-	.08¾
Codeine, NF, cns., 100-oz. lots	oz.	13.25	—
Codeine hydrochloride, cns., 100-oz. lots	oz.	11.75	—
Codeine phosphate, USP, cns., 100-oz. lots	oz.	10.25	—
Codeine sulfate, USP cns., 100-oz. lots	oz.	10.75	—
Codliver oil, USP, dms.	gal.	1.40	1.70
Cohosh root, black, bls.	lb.	.20	.22
Blue, bls.	lb	20	.22
Colchicine, USP, bots.	oz.	27.00	—
Colchicum root, bls.	lb	.30	.35
Colchicum seed, bgs.	lb.	.60	.65
Collodion, USP, cms.	lb.	.32½-	—
Flexible, dms.	lb.	.34	—
Colocynth pulp, bls.	lb.	.75	—
Colombo root, bls.	lb.	.16	.18
Condurango bark, bls.	lb.	.26	—
Congo copal gum, No. 1, bgs.	lb.	.25	.26
No. 2 bgs.	lb.	.22	.24
No. 3, bgs.	lb.	.16½-	.19
Copaiba balsam, cns., dms.	lb.	.65	—
Copaiba oil, cns.	lb.	1.35	2.00
Copper acetate, bbls., c.l., works.	lb.	.53	—
bbls., l.c.l., works	lb.	.54	—
Copper carbonate, 55%, bgs., c.l., works	lb.	.3635-	—
bgs., l.c.l., works	lb.	.3785-	—
Copper chloride, cupric, anhyd., dms., works	lb.	.45½-	46
Cryst., dihydrate, dms., works,	lb.	.31	.31½
Cryst., dried, dms., works	lb.	39¼-	.39¾
Copper chloride, cuprous, dms., works	lb.	.4135-	.4435
Copper cyanide, tech., dms., 20,000-lb lots or more	lb.	.609	—
dms., 1,000-lb. lots or more	lb.	.619	—
dms., smaller lots	lb.	.639	.65
Copper gluconate, dms.	lb.	3.20	—
Copper hydrate, dms., c.l., frt. alld. E. of Miss	lb.	.51¾-	—
dms., l.c.l., same basis	lo.	.52¼-	—
Copper metal, electrolytic, dlvd. Valley basis	lb.	.33	.36
Copper naphthenate, liq., 8% Cu, dms., frt alld	lb.	.26½-	—
Copper nitrate, tech., cryst., dms., works	lb.	.30¾-	.32¾
Copper oleate, solid, 9% Cu, dms., works	lb.	.45	—
Copper oxide, black, bbls., 100-5,000-lb. lots, works.	lb.	.49¼-	—
Copper oxide, red, 97%, USN Type 1, bbls., 100-5,000-lb. lots.	lb.	.50½-	—
90%, USN Type fl, bbls., 100-5,000-lb lots or more, works.	lb.	.48½-	—
Copper quinolinolate, 18% Cu, dms., ton lots	lb.	4.25	—
10% active quinolinolate, dms	lb.	1.14	1.15
Copper resinate, precip, dms., frt. alld	lh.	.36½-	—
Copper sulfate, CP, gran., dms., works	lb.	.1885-	—
cryst., 99%, bgs., c.l., works. 100 lbs.		12.75	-13.00
bgs., l.c.l., works 100 lbs.		13.25	-15.75
Copper sulfate, monohydrated, 35%, dms., c.l., works 100 lbs.		24.00	—
dms., l.c.l., works 100 lbs.		24.75	—
Copper sulfate, tribasic, distributors, bgs., c.l., works 100 lbs.		29.60	—
bgs., l.c.l., works 100 lbs.		31.10	—
Copper undecylenate, dms.	lb	2.75	—
Copra, Atl., Gulf ports, c.i.f.	ton.	230.00	—
Pac. ports, c.i.f.	ton.	225.00	—
Coriander oil, USP, bots.	lb.	9.00	-10.00
Coriander seed, Moroccan, bgs	lb.	.08	—
Rumanian, bgs.	lb.	.07½-	—
Yugoslavian, bgs.	lb.	.08½-	—
Corn oil, crude, tanks, works	lb.	.11¼-	—
Foots (soapstock) acid 95%, tanks, New York	lb.	.04¾-	—
Refd., salad, dms.	lb.	.1698-	.1725
tanks	lb.	.1498-	—
Corn oil, acids, dist., dms.	lb.	.16¾-	.19¼
tanks	lb.	.14¼-	—
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs.		7.30	—
paper bgs., l.c.l. 100 lbs.		7.45	—
Corn syrup, 42° Be., non-ret. dms., c.l 100 lbs.		7.31	—
non-ret. dms., l.c.l. 100 lbs		7.46	—
Corrosive sublimate (see Mercuric chloride).			
Cortisone acetate, USP, bots., kilo or more	gram.	1.15	1.20
Costus oil, bots.	oz	6.00	—
Cottonseed meal, 41%, bgs., Memphis	ton.	66.50	-67.00
Cottonseed oil, crude, tanks, South East	lb.	.09⅛-	.09½
tanks, Valley	lb.	.09	—
tanks, Texas, Lubbock	lb.	.08¾-	.08⅞
tanks, Texas, Waco	lb.	.09	—
Foots, (soapstock), acid 95%, tanks, New York	lb.	.04½-	—
Refd., salad, dms.	lb.	.14¼-	.14¾
tanks	lb.	.12¼-	—
Cottonseed oil acids, dist., dms	lb	.16¾	.19¼
tanks	lb	14¼	—
Coumarin, NF, cryst., dms.	lb.	3.60	3.70
Cramp bark, NF, bls.	lb.	.90	1.00
Cream of tartar (see Potassium bitartrate).			
Creosote carbonate, NF bots chys.	lb	3.05	3.26
Creosote, coaltar, crude, tanks, works, frt. adjusted	gal.	.24	—
Crude, soln. 80%, tanks, works.	gal.	.226	—
Refd., dms., c.l., works	gal.	.50	—
dms., l.c.l., same basis	gal.	.62	—
tanks, same basis	gal	38	—
West Coast creosote prices computed on a basis of 24c. per gallon for straight oil and 20c per gallon for coaltar			
Creosote oil (see Creosote coaltar).			
Creosote, beechwood, chys., dms., f.o.b., works, dlvd in Metropolitan area	lb	1.72	1.77
Hardwood, NF, chys. dms. same basis	lb.	1.42	1.47
Pinewood, dms., incl., c.l., works	lb.	.0561-	—
dms incl., l.c.l., works	lb.	.0634-	—
dms. incl., l.c.l., ex whse, New York	lb.	.0745-	—
tanks, works	lb.	.0460-	—
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms. c.l., frt. alld	lb	.16½-	—
Tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., l.c.l., same basis	lb.	.17½-	—
tanks, same basis	lb.	.145	—
USP, non-ret. dms. c.l., same basis	lb.	.18	—
non-ret. dms., l.c.l., same basis	lb.	.19	—
tanks, same basis	lb.	.16	—
m-Cresol, 95-98% dms. c.l., works.	lb.	.60	—
dms., l.c.l., works	lb.	.61	—
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald	lb.	.18	—
dms., l.c.l., same basis	lb.	.19	—
tanks, same basis	lb.	.16	—
2.97% 2°C., dms., c.l., frt. equald.	lb.	.22	—
dms., l.c.l., same basis	lb.	.23	—
tanks, same basis	lb.	.20	—
o-Cresol, 30.5°C. m.p. and over, ret. dms., c.l., frt. equald	lb.	.17	—
ret. dms., l.c.l., same basis	lb.	.18	—
tanks, same basis	lb.	.15	—
30°-30.49°C. m.p., dms., c.l., frt. equald	lb.	.16½-	—
ret. dms., l.c.l., same basis	lb.	.17½-	—
tanks, same basis	lb.	.14½-	—
29°-29.9°C. m.p., dms., c.l., frt. equald	lb.	.16	—
ret. dms., l.c.l., same basis	lb.	.17	—
tanks, same basis	lb.	.14	—
25°-28°C. m.p., dms., c.l., frt. equald	lb.	.15	—
ret. dms., l.c.l., same basis	lb.	.16	—
tanks, same basis	lb.	.13	—
p-Cresol, 98%, dms., c.l., dlvd	lb.	.52	—
dms., l.c.l., dlvd.	lb.	.53	—
tanks, dlvd.	lb.	.49	—
2,3-Cresotic acid, dms., ton lots, works	lb.	.70	—
dms., smaller lots, works	lb.	.72	—
p-Cresyl methyl ether, cns	lb.	1.80	2.05
Cresylic acid, coaltar, dom., meta-para content above 25%, resins and tricresyl phosphate grades, dms., c.l., t.l., frt equald	gal	1.35	—
dms., l.c.l., same basis	gal.	1.40	—
tanks, same bassi	gal.	1.15	—
Cresylic acid, coaltar, dom., meta para content 25% or less, dms., c.l., t.l., same basis	gal.	1.20	—
dms., l.c.l., same basis	gal.	1.25	—
tanks, frt. equald	gal.	1.00	—
Cresylic acid, coaltar, imp., meta-para content, 25% or less, f.o.b. works, frt. equald. to competitive points, 50 dms. or more	gal.	1.03½-	—
less than 50 dms., same basis	gal.	1.05	1.15
tanks, same basis	gal.	1.00	—
Crotonaldehyde, 91-93%, dms., l.c.l., works	lb.	.25	—
Crotonic acid, dms., 200 lbs. or more, l.c.l., works	lb.	.51	—
Cryolite, nat., indust., bgs., c.l., works 100 lbs.		13.00	—
bgs., l.c.l., works 100 lbs.		14.25	—
Cube root, powd., 5% rotenone, bgs., t.l., works	lb.	.21	—
bgs., l.t.l., works	lb.	.22	—
Cubeb berries, NF, bgs.	lb	1.00	—
Powd., cs.	lb.	1.15	—
Cubeb oil, cns.	lb.	12.00	-16.00
Cumene, dms., c.l., works	lb.	.12	—
dms., l.c.l., works	lb.	.14	—
tanks, works	lb.	.11	—
Cumin seed, Iranian, bgs.	lb.	.30	—
Moroccan, bgs.	lb.	.31	—
Turkish, bgs.	lb.	.27	—
Cumin seed oil, bots., cns.	lb.	15.50	-17.00
Cyanamide, fertilizer, mixing grade, 21% N gran. bgs., Niagara Falls, Ont., contract	ton	57.00	—
Fertilizer, pulv., 21% N, bgs., works. unit ton		55	—
Indust. grade, bgs., c.l., works.	ton.	75.00	—
bgs., l.c.l. works	ton	96.00	—
Indust. grade, 6-16 mesh, dms., c.l. works	ton	120.00	—
dms., l.c.l., works	ton.	140.00	—

COPPER

Copper Sulfate Industrial Crystals and all common grades.

Monohydrated Copper Sulfate 35% Copper as metallic packaged in steel drums at no extra cost.

Copper Carbonate 55% Copper as metallic. Light and dense grades.

Cupric Chloride 37% Copper as metallic. Available in polyethylene lined drums or bags.

SULFUR

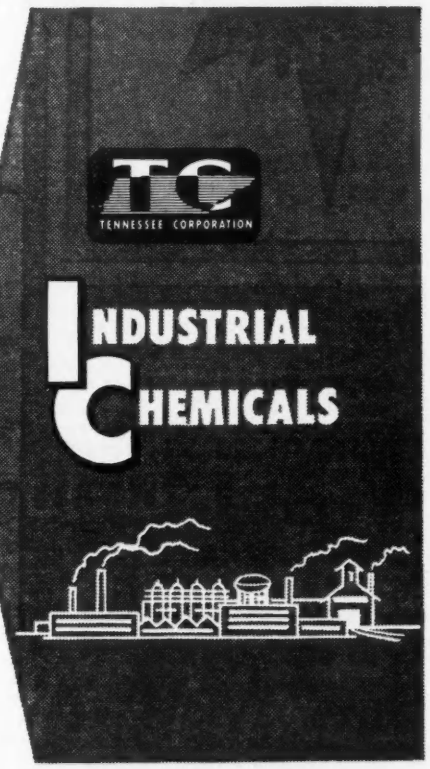
Sulfuric Acid All grades and strengths from 60° Baume through the various Oleums.

Liquid Sulfur Dioxide Highest commercial quality, available in tank cars, tank wagons, ton cylinders and 150-lb. cylinders.

Sodium Hydrosulfite T-C HYDRO is a dry, white, free flowing crystalline powder of uniform particle size and structure. It is dust free, assuring highest stability and uniformity.

Chlorosulfonic Acid Iron less than 1.0 ppm as loaded. Water White. Delivered in glass-lined tank wagons, also in stainless steel drums.

Para Toluene Sulfonic Acid, Anhydrous Other organic Sulfonic Acids.



We mine Copper, Iron, Zinc and Sulfur and are basic producers of their chemical derivatives. Our technical know-how in these basic materials is your assurance of exacting quality control and strict uniform consistency.

IRON

Ferric Iron Sulfate Partially hydrated free flowing granular. Available in bags or bulk.

ZINC

Monohydrated Zinc Sulfate 36% Zinc as metallic. White, free flowing powder.

Zinc Oxide Secondary.

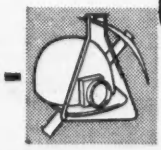
MANGANESE

Manganese Sulfate, Fertilizer Grade

Monohydrated Manganese Sulfate 93% Mn, SO_4, H_2O. Highest purity, technical grade . . . NOT A BY-PRODUCT.

Manganous Oxide Minimum 48% Manganese as metallic. Feeds; fertilizers, spray or dust grades.

For Further Information or Samples, Make Request on Your Firm's Letterhead.



TC TENNESSEE CORPORATION

TENNESSEE CORPORATION

617-29 Grant Building, Atlanta, Georgia

Cyclohexane, 99%, tech., dms., c.l., dlvd. E. of Rockies	gal.	1.02	—
dms., t.c.l., same basis	gal.	1.10	—
dms., c.l., dlvd. W. of Rockies	gal.	.77	—
dms., t.c.l., same basis	gal.	.85	—
tanks, works	gal.	.55	—
98%, tech., dms., c.l., f.o.b. works	lb.	.62½-	—
dms., t.c.l., same basis	lb.	.66½-	—
tanks, same basis	lb.	.40	—
Cyclohexanol, tech., dms., c.l., works, frt alld. E	lb.	.28¼-	—
dms., t.c.l., works, same basis	lb.	.29½-	—
tanks, works, same basis	lb.	.26	—
Cyclohexanone, tech., dms., c.l., works	lb.	.32½-	—
dms., t.c.l., works	lb.	.34½-	—
tanks, works	lb.	.31	—
Cyclohexylamine, dms., c.l., works	lb.	.49	—
dms., t.c.l., works	lb.	.50	—
tanks, works	lb.	.47	—
Cyclopropane, CP, 2-lb. cyls., works	cyl.	48.00	—
6-oz cyls., works	cyl.	12.00	—
USP, hospitals, cyls., 40-gal. lots	gal.	.42	—
cyls., 100-gal lots	gal.	.41	—
cyls., 200-gal. lots	gal.	.40	—
Cypress oil, bots.	lb.	5.30	—

D

2,4-D tech. bgs., dms., c.l., works, frt. equald	lb.	.40	—
bgs., dms., t.c.l., same basis	lb.	.45	.49
2,4-D butyl ester, dms. c.l., works	lb.	.43	—
dms., t.c.l., same basis	lb.	.48	.52
tanks, same basis	lb.	.42	—
2,4-D isopropyl ester, dms., c.l., works	lb.	.43	—
dms., t.c.l., works	lb.	.48	.52
tanks, works	lb.	.42	—
Dammar gum, Batavia A/E, cs	lb.	No stocks.	
East India, Batu bold, bgs.	lb.	.14¼-	.16½
nubs and chips, bgs.	lb.	.08½-	.09½
black, bold bgs	lb.	.14½-	.16½
nubs and chips, bgs.	lb.	.12¼-	.13½
unscraped bgs.	lb.	.13	.14½
pale, chips, bgs	lb.	.14½-	.16
nubs and chips, bgs.	lb.	.09	.10
Siam, cs.	lb.	.30	.33
Singapore No. 1 bgs	lb.	.36	.41
No. 2, bgs	lb.	.29	.32
No. 3, bgs	lb.	No stocks.	
dust, bgs.	lb.	.17	.19
Dandelion root, bls.	lb.	.28	.32
DDD, tech., flake, grd., fib. dms., c.l., works	lb.	.45	.47
fib. dms., t.c.l., works	lb.	.46	.48
DDT, flake or lump, bgs., c.l., dlvd	lb.	.23	—
bgs., smaller lots same basis.	lb.	.25	—
fib. dms., c.l., same basis	lb.	.24	—
fib. dms., smaller lots, same basis	lb.	.26	—
Powdered DDT 1c. per pound higher.			
1-Decanol, tech., dms., c.l., dlvd. E.	lb.	.43½-	—
dms., t.c.l., dlvd. E	lb.	.45½-	—
tanks, dlvd. E	lb.	.41	—
Decyl alcohol, mixed isomers, dms., c.l., dlvd	lb.	.23½-	—
dms., t.c.l., dlvd	lb.	.25	—
tanks, dlvd	lb.	.21	—
Perfume grade, bots.	lb.	1.60	2.00
Decyl alcohol, normal (see 1-Decanol)			
Deertongue leaves, bls.	lb.	.55	.60
Defluorinated phosphate, feed grade, 13% P, paper bgs., c.l., t.l., works	ton.	53.00	—
18% P, paper bgs., c.l., works	ton.	66.25	71.80
19% P, paper bgs, works, Houston, Tex., c.l., t.l.	ton.	74.35	—
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices			
Degras, common, bbls	lb.	.10	.12
Neutral, bbls.	lb.	.21	.21
Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD 17, dms., c.l., dlvd. E. of Rockies	gal.	.69½-	—
dms., t.c.l., same basis	gal.	.74½-	.80½
tanks, dlvd., same basis	gal.	.53½-	—
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division			
Denatured alcohol, ethyl, proprietary solvent, dms., c.l., dlvd. E. of Rockies	gal.	.72	—
dms., t.c.l., same basis	gal.	.77	.83
tanks, same basis	gal.	.56	—
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.			
Denatured alcohol, ethyl, SD1, dms., dlvd. E. of Rockies	gal.	.70½-	—
dms., t.c.l., same basis	gal.	.75½-	.81½
tanks, same basis	gal.	.54½-	—
SD2B, dms., c.l., dlvd. E. of Rockies	gal.	.69	—
dms., t.c.l., same basis	gal.	.74	.80
tanks, same basis	gal.	.53	—
SD3A, dms., c.l., dlvd. E. of Rockies	gal.	.68	—
dms., t.c.l., same basis	gal.	.73	.79
tanks, same basis	gal.	.52	—
SD23A, dms., t.c.l., dlvd. E. of Rockies	gal.	.70½-	—
dms., t.c.l., same basis	gal.	.75½-	.81½
tanks, same basis	gal.	.54½-	—
SD23H, dms., c.l., dlvd. E. of Rockies	gal.	.71	—
dms., t.c.l., same basis	gal.	.76	.82
tanks, same basis	gal.	.55	—
SD29, dms, c.l., dlvd. E. of Rockies	gal.	.69½-	—
dms., t.c.l., same basis	gal.	.74½-	.80½
tanks, same basis	gal.	.53½-	—
SD30, dms., c.l., dlvd. E. of Rockies	gal.	.68	—
dms., t.c.l., same basis	gal.	.73	.79
tanks, same basis	gal.	.52	—
SD-35A, dms., c.l., dlvd. E. of Rockies	gal.	.71	—
dms., t.c.l., same basis	gal.	.76	.82
tanks, same basis	gal.	.55	—
SD-40, dms., c.l., dlvd. E. of Rockies	gal.	.70½-	—
dms., t.c.l., same basis	gal.	.75½-	.81½
tanks, same basis	gal.	.54½-	—
For anhyd. alcohol on above formulas prices are 7c per gal. higher			
West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c. differential on tankcars is maintained.			
d-Desoxyephedrine hydrochloride, dms	lb.	15.00	17.00
dl-Desoxyephedrine hydrochloride, dms	lb.	6.50	—
Dextrin corn gum paper bgs., c.l.,	100 lbs.	9.38	—
paper bgs., t.c.l	100 lbs	9.53	—
canary dark, paper bgs., c.l.	100 lbs.	9.22	—
paper bgs., t.c.l	100 lbs.	9.37	—
Indust. grade 6-16 mesh, dms., canary light paper bgs., c.l.,	100 lbs.	9.12	—
paper bgs., t.c.l	100 lbs	9.27	—
white, paper bgs., c.l	100 lbs	8.96	—
paper bgs., t.c.l	100 lbs.	9.11	—
Corn dextrin in cotton bgs. 15c. per 100 lbs. higher.			
Dextrose, anhyd., coml., bgs., c.l.,	100 lbs.	8.80	—
bgs., t.c.l.	100 lbs.	8.95	—
Anhyd., special, aluminum foil lined fib. dms., 200-lb. dms	100 lbs.	14.70	—
100-lb. dms.	100 lbs.	15.20	—
Hydrated, coml., bgs., c.l., ex whse	100 lbs.	7.80	—
bgs., t.c.l., ex whse	100 lbs.	7.95	—
USP, dms.	lb.	.19¾-	—
Diacetyl, flavor grade, bots.	lb.	4.30	4.55
Di-sec-amyl phenol, dms., c.l., works	lb.	.32	—
dms., t.c.l., works	lb.	.33	—
tanks, works	lb.	.29½-	—
Di-tert-amyl phenol, dms., c.l., works	lb.	.32	—
dms., t.c.l., works	lb.	.33	—
tanks, works	lb.	.29½-	—
Diacetone alcohol, acetone-free, dms., c.l., dlvd	lb.	.15½-	—
dms., t.c.l., dlvd	lb.	.17	—
tanks, dlvd	lb.	.13	—
Diacetone alcohol, tech., dms., c.l., dlvd	lb.	.15	—
dms., t.c.l., dlvd	lb.	.16½-	—
tanks, dlvd.	lb.	.12½-	—
Diallylamine, dms., c.l., dlvd.	lb.	.98½-	—
dms., t.c.l., dlvd	lb.	1.00	—
tanks, dlvd.	lb.	.96	—
o-Dianisidine, dry, tech., fib. dms.	lb.	2.00	—
Dibenzyl sebacate, dms. c.l., works.	lb.	.93	—
dms., t.c.l., same basis	lb.	.94	—
tanks, same basis	lb.	.91	—
p-Dibromobenzene, bgs. 500-lb lots.	lb.	.55	—
2,6-Di-tert-butyl-p-cresol, feed grade, c.l., t.l., dms., dlvd.	lb.	.65	—
t.t.l., dms., same basis	lb.	.68	—
Food grade, c.l., t.l., dms., dlvd.	lb.	.65	—
dms., t.t.l., same basis	lb.	.68	1.10
Tech., dms., c.l., t.l., dlvd.	lb.	.57	—
dms., t.c.l., same basis	lb.	.60	—
tanks, same basis	lb.	.54	—
Dibutyl fumarate, dms., c.l., t.l., dlvd. E	lb.	.31½-	—
dms., t.c.l., t.t.l., dlvd. E	lb.	.33	—
tanks, dlvd. E	lb.	.29	—
Dibutyl maleate, dms., c.l., t.l., dlvd. E	lb.	.31½-	—
dms., t.c.l., t.t.l., dlvd. E	lb.	.33	—
tanks, dlvd. E	lb.	.29	—
Dibutyl phthalate, dms., c.l., dlvd. E.	lb.	.28½-	—
dms., t.c.l., same basis	lb.	.30	—
tankcars, tanktrucks, 2,000 gals., same basis	lb.	.26	—
tanktrucks, 1,000-1,999 gals., same basis	lb.	.26½-	—
Dibutyl sebacate, dms., c.l., works.	lb.	.67½-	—
dms., t.c.l., works	lb.	.68½-	—
tanks, works	lb.	.63½-	—
Dibutyl tartrate, dms., works, frt. alld	lb.	.63½-	—
Dibutylamine, dms. c.l., dlvd	lb.	.55½-	—
dms., t.c.l., same basis	lb.	.57	—
tanks, same basis	lb.	.53	—
Dicapryl phthalate, dms., c.l., dlvd.	lb.	.28	—
dms., t.c.l., dlvd	lb.	.29½-	—
tanks, dlvd.	lb.	.24½-	—
Dicapryl sebacate, dms., c.l., works.	lb.	.63	—
dms., t.c.l., works	lb.	.63½	.64
tanks, works	lb.	.61	—
2,5-Dichloroaniline, dms., works	lb.	.83	—
3,4-Dichloroaniline, tech., solid, tanks, frt. alld	lb.	.73	—
o-Dichlorobenzene, dms., c.l., frt. alld. E	lb.	.12¾-	—
dms., t.c.l. same basis	lb.	.13¾-	—
tanks, same basis	lb.	.11	—
p-Dichlorobenzene, dms., c.l., f.o.b., works, frt. alld. E	lb.	.12	—
dms. 2,000 lbs. or more same basis.	lb.	.14½-	—
1,4,-Dichlorobutane, dms. c.l. or t.l., works	lb.	.33½-	—
dms., t.c.l., or t.t.l., works	lb.	.34	—
tanks, works	lb.	.32	—
Dichlorodiphenyltrichloroethane (see DDT).			
2,2-Dichloroethyl ether, dms., c.l., t.l., dlvd. E	lb.	.15½-	—
dms., t.c.l., t.t.l., same basis	lb.	.17	—
tanks, same basis	lb.	.13	—
Dichloropentanes, dist., dms., c.l., works	lb.	.05	—
dms., t.c.l., works	lb.	.06	—
tanks, works	lb.	.03	—
Dichlorophenoxyacetic acid (see 2,4-D).			
Dicyclohexylamine, dms., c.l., works.	lb.	.54	—
dms., t.c.l., works	lb.	.55	—
tanks, works	lb.	.52	—

DIALKYL-CHLOROALKYLAMINE HYDROCHLORIDES

FACILE WORKING TOOLS FOR . . .

RCl · HCl

R= Me2NCH2CH2— (DMC*)
Et2NCH2CH2— (DEC*)
iPr2NCH2CH2— (DIC*)
Me2NCH2CH2CH2— (DMPC*)
Et2NCH2CH2CH2— (DEPC*)
Me2NCH2CH(CH3)CH2— (DMMPC*)
Me2NCH2CH(CH3)— (DMIC*)

*Michigan Chemical product names for the chloride hydrochloride form of R. All commercially available.

Alkylation of amines:
RCl + NH3 → RNH2
RNH2 + RCl → R2NH
R2NH —(1. NaNH2, 2. RCl)→ R3N
R3N + RCl → R4N+Cl−

Alkylation of alcohols and acids:
ROH —(1. Na, 2. RCl)→ ROR
RCO2H + RCl —(base)→ RCO2R

Alkylation of active methylene groups:
CH2 —(1. Na + alcohol, 2. RCl)→ CHR

Formation of Grignard reagents:
RCl + Mg → RMgCl

Reaction with metal salts:
RCl + NaSH → RSH + NaCl

Investigate these versatile intermediates. They are creating valuable cellulose derivatives for the textile and paper industries, and are used in pharmaceuticals to increase biological activity in tranquilizers, local anesthetics, and other drugs. Other derivatives may find use as curing agents in plastic systems. Michigan Chemical has been a leading producer of the dialkylchloroalkylamine hydrochlorides for over 12 years. Recent process advances have improved quality significantly and have also brought about considerably lower prices. Write for technical data, specifications, and prices. From sample to carload quantities can be supplied.

MICHIGAN CHEMICAL CORPORATION
670 North Bankson Street, Saint Louis, Michigan
EASTERN SALES OFFICE: 230 Park Avenue, New York 17, N.Y.

Copyright 1959 by Michigan Chemical Corporation

C-59-4

Dicyclohexyl phthalate, gran., fib. dms., c.l., works, frt. alld. lb. .46½- —
fib. dms., l.c.l., same basis lb. .48 - —
Didecyl phthalate, dms. c.l., works, lb. .28½- —
dms., l.c.l., same basis lb. .30 - —
tankcars, tanktrucks 2.000 gals., lb. .26 - —
tanktrucks, 1,000-1,999 gals, same basis lb. .26½- —
Dieldrin, dms., c.l., dlvd lb. 1.85 - —
dms., l.c.l., dlvd lb 1.90 - —
Diethanolamine, dms., c.l., dlvd E. lb. .27 - —
dms., l.c.l., same basis lb. .28½- —
tanks, same basis lb. .24½- —
Diethanolamine lauryl sulfate, dms., c.l., frt. alld lb. .27½- —
dms., l.t.l., frt. alld lb. .28½- —
tanks, frt. alld lb. .26½- —
Diethyl barbituric acid (see Barbital)
dms., t.t.l., same basis lb. .18½- —
Diethyl carbonate, dms. c.l., f.o.b. works lb. .47½- —
dms. l.c.l. same basis lb. .48½- —
tanks, same basis lb. .45 - —
Diethyl ethanolamines, dms., c.l., dlvd lb. .69½- —
dms., l.c.l., dlvd. lb. .71 - —
tanks, dlvd lb .67 - —
Diethyl oxalate, dms. c.l., f.o.b. works lb. .42½- —
dms., l.c.l., same basis lb. .43½- —
tanks, same basis lb. .40 - —
Diethyl phthalate, dms., c.l., dlvd. lb. .27½- —
dms., l.c.l., dlvd lb. .29 - —

Diethyl phthalate, tanktrucks, 1.000-1,999 gals., same basis lb. .26½- —
tankcars, tanktrucks, 2.000-lb. lots, same basis lb. .26 - —
Diethyl sulfate dms. c.l. works lb. .19½- —
dms., l.c.l., works lb. .20¼- —
tanks, works lb. .17½- —
Diethyl toluamide, 90-95% meta isomer, dms., c.l., t.l., works lb 2.30 - —
5-44 dm lots, works lb 2.35 - —
1-4 dm lots, works lb. 2.40 - —
Diethylamine dms., c.l., dlvd. E lb. .52 - —
dms., l.c.l., same basis lb. .53½- —
tanks, same basis lb. .49½- —
N,N-Diethylaniline dms., c.l., frt. alld lb. .57 - —
dms., l.c.l., same basis lb. .58 - —
tanks, same basis lb. .55 - —
Diethylbenzene, dms. t.l., frt. alld. lb. .16½- —
N,N-Diethyl-m-toluidine tech., liq., tanks, frt. alld lb. .83 - —
Di-2-ethylhexyl adipate (see Dioctyl adipate).
Di-2-ethylhexyl phthalate (see Dioctyl phthalate).
Diethylene glycol, dms., c.l. dlvd. E lb. .17¾- —
dms., l.c.l., same basis lb. .19¼- —
tanks, same basis lb. .15¼- —
Diethylene glycol diethyl ether, dms., c.l., works lb. .51½- —
dms., l.c.l., works lb. .52¼- —

Diethylene glycol monobutyl ether, c.l. dms., works lb. .30¾- —
dms., l.c.l., works lb. .32¼- —
tanks, dlvd. E lb. .28¼- —
Diethylene glycol monobutyl ether acetate, dms., c.l., works lb. .30¾- —
dms., l.c.l., works lb. .31½- —
tanks, dlvd. E lb. .28¾- —
Diethylene glycol monoethyl ether, dms., c.l., dlvd lb. .22½- —
dms., l.c.l., dlvd lb. .24 - —
tanks, dlvd. E lb. .20 - —
Diethylene glycol monoethyl ether acetate dms., c.l., works lb. .27¼- —
dms., l.c.l., works lb. .28 - —
tanks, works lb. .25¼- —
Diethylene glycol monomethyl ether, dms., c.l., dlvd lb. .21 - —
dms., l.c.l., dlvd lb. .22½- —
tanks, dlvd. E lb. .18½- —
Diethylenetriamine, dms., c.l., dlvd. E lb. .44 - —
dms., l.c.l. dlvd. E lb. .45½- —
tanks, dlvd. E lb. .41½- —
Diethylstilbestrol USP bots, 10-kilo lots kilo. 100.00 -147.50
bots., 1-kilo lot kilo. 110.00 -152.50
Digitalis leaves, USP, dom., dms. lb. 1.25 - —
Digitoxin, USP bots gram 4.75 - —
Diglycol laurate, dms lb. .32¾- .34
Diglycol stearate, dms, ton lots lb. .26 - .28
Diglycolic acid, bgs. c.l., t.l., works. lb. .15½- —
bgs., l.c.l., works lb. .16 - —
Dihexyl sebacate, dms., c.l., works. lb. .66 - —
dms., l.c.l., works lb. .67 - —
tanks, works lb. .64 - —
Dihydrazine sulfate, dms., works lb. 1.10 - 1.25
Dihydrostreptomycin hydrochloride, bulk gram .04 - .041

Dihydrostreptomycin sulfate, bulk, gram .04 - .041
1,2-Dihydroxy anthraquinone, dms., works lb. 3.45 - —
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms lb. 2.55 - —
tech., dms., 20,000 lbs. or more lb. 1.11 - —
dms., 1,050 lbs. to 20,000 lbs. lb. 1.13 - —
dms., 150 lbs. to 1,050 lbs. lb. 1.15 - —
Di-isobutyl ketone, dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd lb. .18½- —
tanks, dlvd. lb. .14½- —
Di-isobutyl phthalate, dms., c.l., dlvd. E lb. .31½- —
dms., l.c.l., same basis lb. .32½- —
tanks same basis lb. .29 - —
Di-isobutylene dms., c.l., dlvd. E. lb. .10 - —
dms., l.c.l., dlvd. E lb. .11½- —
tanks, dlvd. E lb. .08 - —
Di-iso-octyl phthalate, dms., c.l., dlvd lb. .27½- —
dms., l.c.l. same basis lb. .29 - —
tanktrucks, 1,000-1,999 gals., dlvd. lb. .25½- —
tankcars, tanktrucks, 2,000 gals., dlvd. lb. .25 - —
Di-iso-octyl sebacate, dms., c.l., works lb. .62 - —
dms., l.c.l., works lb. .62½- .63
tanks, works lb. .60 - —
Di-isopropanolamine dms., c.l., dlvd. lb. .23¼- —
dms., l.c.l., same basis lb. .24¾- —
tanks, same basis lb. .20¾- —
Di-isopropylamine dms., c.l., dlvd. E. of Rockies lb. .50½- —
dms., l.c.l., same basis lb. .52 - —
tanks, same basis lb. .48 - —
Dillweed oil, dom., bots., dms. lb. 3.00 - 4.00
Dimethyl anthranilate, cns lb. 4.15 - —
Dimethyl ethanolamines, anhyd., dms. c.l., dlvd lb. 1.225 - —
dms., l.c.l., dlvd. lb. 1.235 - —
tanks, dlvd. lb. 1.20 - —
70% dms. c.l., dlvd., 100% basis, contained amines lb. .68½- —
dms., l.c.l., dlvd., 100% basis lb. .69½- —
tanks, dlvd. 100% basis lb. .66 - —
Dimethyl hydroquinone, dms. lb. 1.90 2.20
Dimethyl phthalate, dms., c.l., works lb. .27½- —
dms., l.c.l., works lb. .29 - —
tanktrucks, 1,000-1,999 gals., same basis lb. .25½- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .25 —
Dimethyl sebacate, dms., c.l., works. lb. 1.31 - —
dms., l.c.l., works lb. 1.30 - —
tanks, works lb. 1.28 - —
Dimethyl sulfate, ret. dms., c.l., works lb. .17½- —
ret. dms., l.c.l., works lb. .18½- —
tanks, works lb. .16½- —
Dimethyl sulfide, dms., c.l., works. lb. .16½- —
dms., l.c.l., works lb. .17 - —
tanks, works lb. .15 - —
Dimethylamine, 25% soln., dms., c.l., frt. equald, 100% basis lb. .38 - —
dms., l.c.l., frt. equald, 100% basis lb. .38½- —
tanks, frt. equald, 100% basis lb. .28 - —
40% soln., dms., c.l., frt. equald, 100% basis lb. .35 - —
dms., l.c.l., frt. equald, 100% basis lb. .35½- —
tanks, frt. equald, 100% basis. lb. .28 - —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. .28 - —
dms., l.c.l., same basis lb. .29 - —
tanks, same basis lb. .26 - —
N-N-Dimethylformamide, dms., c.l., t.l., works lb. .32½- —
dms., l.c.l., works lb. .33 - .34
tanks, works lb. .30 - —
2,4-Dinitroaniline, dms. frt alld lb. .75 - —
Dinitroaniline orange toner, CP, bbls. dlvd E of Rockies lb. 1.56 - —
Dinitroaniline orange toner prices 1c. higher W of Rockies
m-Dinitrobenzene, 89°C., dms lb. .26 - —
2,4-Dinitrochlorobenzene, crystallizing at 46½°C. dms., c.l., frt. alld. E lb. .17¼- —
dms., l.c.l., frt. alld. E lb. .17¾- —
tanks, frt. alld. E lb. .17 - —
2,4-Dinitrophenol, bbls lb. .41 - —
2,4-Dinitrotoluene, oily dms. lb. .11 - —
Refd., 63°C., dms. lb. .23 - —
Dioctyl adipate dms. c.l., works. lb. .42½- —
dms., l.c.l. works lb. .43½- —
tanks, works lb. .40 - —
Dioctyl phthalate, dms., c.l., frt. alld lb. .27½- —
dms. l.c.l., frt alld lb. .29 - —
tanktrucks, 1,000-1,999 gals., same basis lb. .25½- —
tankcars, tanktrucks, 2,000 gals., same basis lb. .25 —
Dioctyl sebacate, dms., c.l., works. lb. .61¼- —
dms., l.c.l., works lb. .62¼- —
tanks, works dlvd. lb. .59¼- —
1,4-Dioxane, dms., c.l. works lb. .30 - —
dms., l.c.l. works lb. .30¾- —
tanks, works lb. .28 - —
Dipentaerythritol, bgs., c.l., t.l., dlvd. E lb. .40 - —
bgs., l.c.l., t.t.l., dlvd E lb. .41 - —
Dipentene, dest.-dist., dms., c.l., works gal. .59 - —
dms. l.c.l. works gal. .63 - —
dms., l.c.l., ex whse. gal. .79 - —
tankcars, works gal. .42 - —
Steam dist., dms., c.l., works, South gal. .72 - —
dms., l.c.l. dlvd. New York gal. .91 - —
tanks, works, South gal. .55 - —
Dip oil (see Tar acid oil)
Diphenyl, bgs., c.l., t.l., works lb. .17¼- —
bgs., l.c.l., works lb. .19 - —
tanks, works lb. .16 - —
Diphenyl oxide, perfume grade, cns. lb. .55 - .70
Diphenyl phthalate, dms., c.l., works. lb. .51¾- —
dms., l.c.l., works lb. .53¾- —
Diphenylamine, refd., flake, bgs., c.l., works, frt. equald lb. .31 - —
bgs., l.c.l., same basis lb. .33 - —
Refd., fused, tanks, same basis lb. .28 - —
same basis lb. .28 - —
Refd. diphenylamine in dms ½c. per lb. higher.
Diphenylguanidine, bgs., dms., ton, lots, frt. alld lb. .49 - —
bgs. smaller lots, frt. alld. lb. .50 - —
Diphenylhydantoin-sodium USP dms. lb. 5.00 - 5.60
Dipropylene glycol, dms., c.l., frt, alld lb. .17¾- —
dms., l.c.l., frt. alld lb. .19¼- —
tanks, frt. alld lb. .15¼- —
Dipropylene glycol methyl ether, dms., c.l., dlvd E lb. .20 - —
dms., l.c.l., same basis lb. .21½- —
tanks, same basis lb. .18½- —
Dithiodibenzoic acid, dms., 1,000-lb. lots, works lb. 1.45 - —
Di-o-tolylguanidine, dms., ton lots, frt. alld lb. .69 - —
dms., smaller lots, frt alld lb. .70 - —
Di-o-tolylthiourea, tech., solid, dms., c.l., t.l., frt. alld lb. .55 - —

MONTROSE
CHEMICAL COMPANY

100 LISTER AVENUE
NEWARK, NEW JERSEY

Dimethyl Isophthalate

Trimethyl Borate — Trimethoxy Boroxine

T.C.P. — Tricresyl Phosphate

Mono Cresyl Diphenyl Phosphate

D.D.T. — Dichloro Diphenyl Trichloroethane

Ethyl Silicate 28% — 40%

D.D.V.P. — Dimethyl Dichloro Vinyl Phosphate
(Minimum 95% Purity)

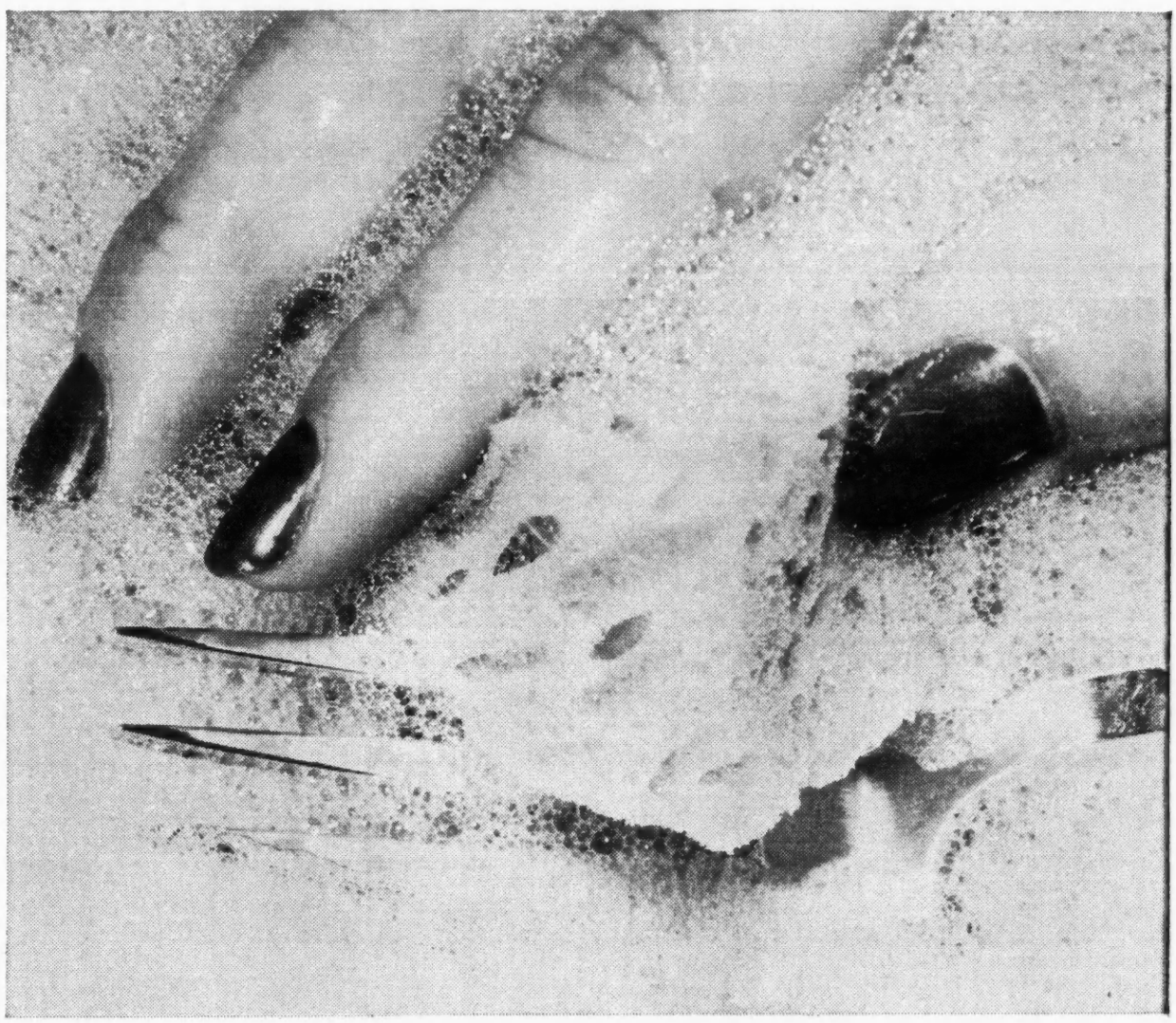
EXCLUSIVE SALES AGENTS

R. W. GREEFF & CO., INC.
10 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.
1721 TRIBUNE TOWER, CHICAGO, ILLINOIS

Divinylbenzene, 20-25%, dms., c.l., works, frt. equald	lb.	.20	—
dms., l.c.l., same basis	lb.	.21	—
tanks, same basis	lb.	.19	—
50-60%, dms., c.l., works, 100% basis	lb.	1.00	—
dms., l.c.l., works, 100% basis	lb.	1.05	—
Dodecylbenzene, dms., c.l., f.o.b. works, frt. equald	lb.	.134	—
dms., l.c.l., same basis	lb.	.144	—
tanks, same basis	lb.	.114	—
Dodecylphenol, c.l., frt. alld.	lb.	.22	—
dms., l.c.l., same basis	lb.	.23	—
tanks, same basis	lb.	.19½	—
Dodecylphenol prices on shipments to Western States are 2c. per pound higher.			
Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb and 1-lb. lots, dlvd:			
Blue, FD&C, No. 1	lb.	15.63	-17.60
No. 2	lb.	15.65	-17.60
Green, FD&C, No 1	lb.	15.65	-17.60
No. 2	lb.	19.60	-22.85
No. 3	lb.	31.30	-35.90
Red, FD&C, No. 1, cns.	lb.	5.90	- 7.85
No. 2	lb	3.30	- 4.10
No. 3	lb.	19.60	-22.85
No. 4	lb	5.55	- 7.50
Violet, FD&C, No. 1, cns.	lb.	15.65	-17.60
Yellow, FD&C, No. 1, cns.	lb.	9.15	-11.05
No. 5	lb.	3.30	- 4.10
No. 6	lb.	3.30	- 4.10
Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb. lots, dlvd:—			
Black, D&C, No. 1	lb.	10.50	-10.95
Brown, D&C, No. 1	lb.	15.65	-16.10
Green, D&C, No. 5	lb.	15.65	-16.10
No. 6	lb.	15.65	-16.10
No. 7	lb.	14.35	-14.80
Orange, D&C, No. 3	lb.	10.50	-10.95
No. 4	lb.	19.60	-20.05
No. 5	lb.	3.80	- 4.25
Red, D&C, No 17	lb.	10.50	-10.95
No. 18	lb.	23.60	-24.00
No. 19	lb	15.00	-15.45
No. 21	lb.	3.90	- 4.35
No. 22	lb.	10.50	-10.95
No. 28	lb.	24.15	-24.65
No. 33	lb.	17.00	-17.45
Violet, D&C, No. 2	lb.	15.65	-16.10
Yellow, D&C, No 7	lb.	10.50	-10.95
No. 8	lb.	10.50	-10.95
No. 10	lb.	13.05	-13.50
No. 11	lb.	13.05	-13.50
Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb. and 1-lb. lots dlvd:—			
Blue, Ext., D&C, No. 1, cns	lb.	15.65	-16.10
Green, Ext., D&C, No 1, cns	lb.	15 65	-16.10
Red, Ext., D&C, No 1. cns	lb.	13.05	-12.50
Yellow, Ext., D&C, No. 1. cns	lb.	10.50	-10.95
Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract dlvd. No.			
11110 Brilliant scarlet BN	lb.	1.70	—
13390 Fast blue SR	lb.	1.30	—
14025 Yellow 2G	lb.	1.18	—
14030 Orange R, extra, conc.	lb.	1.52	—
14645 Chrome black T	lb.	.73	—
14720 Rubine XX, conc.	lb.	1.47	—
15510 Orange Y, extra conc.	lb.	.79	—
15575 Orange RR	lb.	.94	—
15620 Fast Red A, conc.	lb.	1.53	—
15705 Chrome blue black R, conc.	lb.	1.07	—
16150 Scarlet 2RL	lb.	1.16	—
16230 Fast light, orange 2G	lb.	1.39	—
16255 Brilliant scarlet 3RN, conc.	lb.	1.20	—
17590 Brown PG	lb.	3.00	—
18050 Phloxine 2G	lb.	1.05	—
18055 Fuchsine 6B	lb.	1.55	—
18965 Fast Yellow 2G	lb.	2.32	—
19140 Yellow XX	lb.	2.30	—
19555 Yellow NN, conc	lb.	3.67	—
20170 Brown Y	lb	1.27	—
20470 Blue black, extra, conc	lb	1.37	—
21010 Brown, HX, conc.	lb.	1.35	—
22240 Scarlet B	lb.	2.60	—
22310 Red FC	lb.	1.45	—
22311 Brown MCW	lb.	1.40	—
22590 Diazo black BHD	lb.	.93	—
22610 Blue 2B, extra conc.	lb.	1.53	—
23500 Red, 4BX, conc	lb.	1.80	—
24410 Sky blue FF, extra, conc	lb.	1.95	—
24895 Brilliant yellow conc.	lb.	3.11	—
26400 Navy blue 3R, conc.	lb.	1.70	—
26695 Black F, conc.	lb.	2.19	—
26900 Milling Red 3R, conc.	lb.	1.91	—
27075 Neutral black 2B conc	lb.	2.75	—
27720 Gray L	lb.	2.08	—
29185 Fast scarlet 4BNC	lb.	2.12	—
30015 Diazo black VJ conc.	lb.	2.48	—
30235 Black EB, 200%	lb.	1.33	—
30045 Yellow brown K, extra	lb.	1.26	—
30295 Green BY, conc.	lb.	1.02	—
35660 Brown B	lb.	2.89	—
37565 Naphthol SWF	lb.	1.76	—
40000 Yellow 2G	lb.	1.31	—
41000 Yellow OX	lb.	2.45	—
42000 Green V, crystals	lb.	2.73	—
42040 Brilliant green G crystals	lb.	3.62	—
42090 Blue EG	lb.	1.85	—
42100 Milling green 6B, conc.	lb.	4.78	—
42640 Violet 4BXN	lb.	2.25	—
43820 Brilliant blue BBG	lb.	2.44	—
44045 Blue B, extra conc.	lb.	3.61	—
45170 Red BX	lb.	4.76	—
50415 Nigrosine SSJ	lb.	1.03	—
52015 Blue GXX	lb.	2.22	—
53185 Black, GXCF, conc.	lb.	.38	—
58005 Alizarin red SC	lb.	3.31	—
59700 Golden orange GFD, single paste	lb.	2.70	—
59710 Flaming orange 6RD double powder	lb.	4.90	—
59800 Dark blue BO, single paste	lb.	2.28	—
59825 Jade green NC supra, double paste	lb.	1.50	—
61570 Alizarin green CG, extra	lb.	3.53	—
63010 Alizarin blue SAPG	lb.	3.78	—
63615 Alizarin blue black B	lb.	3.02	—
69825 Blue BLFD double paste	lb.	2.82	—
70800 Brown BR single paste	lb.	2.03	—
Dyes, coaltar, oil-soluble, 100-lb. drums dlvd. No.			
12140 Oil scarlet BL	lb.	1.70	—
12055 Oil orange 7078-V	lb.	5.87	—
26120 Oil red N-1700	lb.	1.76	—
42535B Methyl violet base	lb.	1.88	—
44045B Victoria blue base	lb.	4.06	—
50415B Oil black 8603	lb.	.80	—
61565 Alizarin cyanine green base,	lb.	6.13	—
Spirit black RB	lb.	3.89	—
Spirit brown GN	lb	5.30	—
Spirit orange R conc.	lb	5.87	—
Spirit red B conc	lb	6.41	—
Spirit yellow 2R conc.	lb	4.62	—
12035 Spirit orange 7078-V	lb	1.25	—
Spirit blue THN	lb.	5.06	—

E

Echinacea root, bls	lb.	1.10	—
Elm bark, grinding, bls.	lb.	.30	.32
Powd., bbls., bxs.	lb.	.45	—
Select, bundles	lb.	.75	—
Emetine hydrochloride, USP, bots.	oz.	48.40	—
Endrin, tech., dms., t.l., dlvd	lb.	3.35	—
Eosin red toner, bbls., works	lb.	1.85	—
Ephedrine, syn., USP, anhyd., bots, 100-oz. lots	oz.	.98	1.00
hydrous bots, 100-oz. lots	oz.	.92	—
Ephedrine hydrochlorides, NF, dms.,	oz.	.80	.85
Ephedrine sulfate, USP, cryst., dms.,	oz.	.60	.80
USP, powd., dms.	oz.	.60	.80
Epichlorohydrin, dms., c.l., dlvd	lb.	.29½	—
dms., l.c.l, dlvd	lb.	.31	—
tanks, dlvd.	lb.	.27	—
Epsom salt (see Magnesium sulfate).			
1-Epinephrine base, syn., USP, bots., 100 gram lots gram.		.58	—
Erigeron oil, cns.	lb.	11.00	—
Ergot, NF, dms., tin-lined	lb.	1.50	—
Eserine salicylate, bots	oz.	54.75	—
Eserine sulfate, bots	oz.	86.00	—
Ester gum, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va.	lb.	.18	—
Wood-rosin type, dms., c.l., same basis	lb.	.18	—
Ether (see specific product).			
Ethyl acetate, nat., ferment 85-88%, dms., c.l., dlvd	lb.	.15	—
dms., l.c.l., dlvd	lb.	.16½	—
tanks, dlvd.	lb.	.12½	—
95-98%, dms., c.l., dlvd	lb.	.15¼	—
dms., l.c.l., dlvd	lb.	.16¾	—
tanks, dlvd.	lb.	.12¾	—
99%, dms., c.l., dlvd.	lb.	.15½	—
dms., l.c.l., dlvd	lb.	.17	—
tanks, dlvd.	lb.	.13	—
Syn., 85-88%, dms., c.l., dlvd	lb.	.15	—
dms., l.c.l., dlvd	lb.	.16½	—
tanks, dlvd.	lb.	.12½	—
95-98%, dms., c.l., dlvd	lb.	.15¼	—
dms., l.c.l., dlvd	lb.	.16¾	—
tanks, dlvd.	lb.	.12¾	—
99%, dms., c.l., dlvd.	lb.	.15½	—
dms., l.c.l., dlvd.	lb.	.17	—
tanks, dlvd.	lb.	.13	—
Ethyl acetoacetate, dms., c.l., dlvd.	lb.	.58½	—
dms., l.c.l., dlvd.	lb.	.60	—
tanks, dlvd.	lb.	.56	—
Ethyl acrylate, dms., c.l., t.l., dlvd.	lb.	.36	—
dms., l.t.l., dlvd.	lb.	.37	—
tanks, dlvd.	lb.	.34	—
Ethyl alcohol, 190 pf., USP, tax paid dms., c.l., dlvd. E. of Rockies	gal.	20.63	—
dms., l.c.l., same basis	gal.	20.68	-20.74
Ethyl alcohol, 190 pf., USP, tax-free, dms., c.l., dlvd. E. of Rockies	gal.	.68	—
dms., l.c.l, same basis	gal.	.73	- .79
tanks, same basis	gal.	.52	—
Ethyl alcohol, absolute 200 pf., tax paid, dms., dlvd. E. of Rockies	gal.	21.75	—
dms., l.c.l., same basis	gal.	21.80	-21.86
tanks, same basis	gal.	21.59	—
Ethyl alcohol, denatured (see Denatured alcohol, ethyl).			
Ethyl aminobenzoate, USP (see Benzocaine).			
Ethyl amyl ketone, dms., c.l., dlvd.	lb.	.20	—
dms., l.c.l., same basis	lb.	.21½	—
tanks, same basis	lb.	.17½	—
Ethyl benzoate, bots	lb.	.75	- 1.00
Ethyl bromide, tech., 98%, dms., c.l., frt. alld. E	lb.	.43	—
dms., l.c.l., frt. alld. E	lb.	.45	—
tanks, frt. alld. E.	lb.	.41	—
2-Ethyl butyl alcohol, dms., c.l., works	lb.	.30	—
dms., l.c.l., works	lb.	.30¾	—
tanks, works	lb.	.28	—
Ethyl butyl ketone, dms., c.l., t.l., works	lb.	.36	—
dms., l.c.l., l.t.l., works	lb.	.36¾	—
tanks, works	lb	.34	—
Ethyl butyrate, dms., works	lb.	.85	- 1.00
Ethyl carbamate (see Urethane).			
Ethyl cellulose, vis. 7 cps., bgs., 5,000-lb. lots or more, frt. alld E	lb	.73	—
bgs., smaller lots, frt. alld E	lb.	.75	—
Ethyl cellulose, vis. to, 20, 50, 100, 150 cps., bgs., 5,000 lb. lots or more, frt alld E	lb.	.68	—
bgs., smaller lots, frt. alld E.	lb.	.70	—
Ethyl chloride, tech., cyls., works.	lb.	.20	.22
dms., works	lb.	.18	.20
tanks, works	lb.	.10	—
Ethyl cinnamate, cns.	lb.	3.35	3.50
Ethyl ethanolamines, mixed, dms., c.l., dlvd E	lb.	.43½	—
dms., l.c.l., dlvd. E	lb.	.44½	—
tanks, dlvd. E.	lb.	.41½	—
Ethyl ether, absolute, ACS dms	lb.	.27	—
Anesthesia, USP, dealers, 1-lb. cns.	lb.	1.01	—
½-lb. cns.	lb	1.09	—
¼-lb. cns.	lb.	1.21	—
Indust., dms., c.l., dlvd.	lb.	.13½	—
dms., l.c.l., dlvd &	lb.	.15	—
tanks, dlvd. E.	lb.	.11	—



SHE WON'T KNOW WHY, BUT...

Every homemaker will be glad you used Jefferson SURFONIC® Surface-Active Agents

You don't expect her to know the technical reasons, but milady can certainly tell you which cleansing products are effective and how they have made her chores easier and simpler than ever before. Name virtually all the items she keeps beneath the kitchen sink, and you have practical applications for the broad modification properties of Jefferson SURFONIC® surface-active agents . . . low-foaming laundry detergents, liquid dishwashing detergents, high-foaming liquid detergents, general purpose cleaners, germicidal detergents, sanitizers, detergent bars, metal cleaners, and a host of other products.

Jefferson Chemical Company's surfactants are nonionic adducts of nonyl phenol (N-series 10 to 300) or tridecyl alcohol (TD-series 30 to 150) and ethylene oxide. The number is a tenfold multiple of the molar ratio of ethylene oxide to the hydrophobic portion of the adduct. SURFONIC® surface-active agents have excellent wetting, detergency, solubility, penetration, dispersion and compatibility properties and are stable over a wide range of conditions. Jefferson nonionic adducts may also be sulfated to produce anionic surface-active agents.

A comprehensive technical bulletin, "SURFONIC® Surface-Active Agents", is available from Jefferson Chemical Company, Inc., 1121 Walker Avenue, P. O. Box 303, Houston 1, Texas.

Ethylene and Propylene Oxides, Glycols, Dichlorides, Carbonates • Ethanolamines
SURFONIC® Surface-Active Agents • Polyethylene and Polypropylene Glycols • Morpholine
N-Alkyl Morpholines • Piperazine • Piperazine Salts • Nonyl Phenol • Caustic Soda
HOUSTON • NEW YORK • CHICAGO • CLEVELAND • CHARLOTTE • LOS ANGELES

JEFFERSON CHEMICALS

2-Ethyl Hexoic Acid—Ginger Oil

2-Ethyl hexoic acid dms. c.l., t.l., dlvd E lb .37
dms., l.c.l., t.l. dlvd E lb .38½- —
tanks dlvd E lb .34½- —
2-Ethyl hexoic acid 1c higher W. of Rockies
2-Ethylhexyl acrylate, c.l. or t.l., straight or mixed frt. alld E lb .42½- —
dms., t.l.. same basis lb .43½- —
tanks, same basis lb .40 - —
Prices of 2-ethylhexyl acrylate are 1½c. per lb higher in Ariz., Calif., Idaho, Nev Ore. Utah and Wash
2-Ethylhexyl alcohol dms c.l. dlvd. lb .23¾ - —
dms. l.c.l. dlvd. lb .25¼ - —
tanks. dlvd lb .21¼ - —
Ethyl iodide chys., works lb 3.30 - —
Ethyl methacrylate dms., c.l., frt equald lb .52 - —
dms. t.l.l frt. equald lb .52½ - —
tanks, frt. equald. lb .50 - —
Ethyl morphine hydrochloride, USP bots or tins lb 11.95 - —
Ethyl oenanthate, dms lb 1.05 - 1.30
Ethyl oxalate (see Diethyl oxalate)
Ethyl silicate, dist. (see Tetraethyl orthosilicate)
Ethyl silicate, 40% available, SiO_2, dms., c.l., dlvd lb .44½- —
dms., t.c.l. dlvd. lb .46 - —
tanks, dlvd lb .42 - —
N-Ethyl-a-naphthylamine, dms. works lb 1.02 - —
N-Ethyl-m-toluidine, tech., liq., tanks frt. alld lb .83 - —
N-Ethyl-o-toluidide, bbls. lb .88 - —
Ethylamine (see Mono-, Di-, or Tri-).
N-Ethylaniline, dms., c.l., frt. alld. lb .57 - —
dms., t.c.l., frt. alld. lb .58 - —
tanks, frt. alld. lb .55 - —
Ethylbenzene 99% dms., c.l. or t.l., frt. equald lb .15 - —
dms., t.c.l., same basis lb .17 - —
tanks, same basis lb .12½- —
2-Ethylbutyl alcohol, dms., c.l., works lb .30 - —
dms., t.c.l., works lb .30¾ - —
Ethylene, contract, ref'y. gate lb .0475- 0525
Ethylene dibromide, dms., c.l., frt. equald lb .30½- —
dms., t.c.l. frt. equald. lb .31½- —
tanks, frt. equald lb .28½- —
Ethylene dichloride, dms., c.l., dlvd. lb .11½- —
dms., t.c.l., same basis lb .13 - —
tanks, same basis lb .09 - —
Ethylene dichloride prices W of Rockies, 1c per lb higher.
Ethylene glycol, indust., dms., c.l., dlvd. E lb .16 - —
dms., t.c.l., same basis lb .17½- —
tanks, same basis lb .13½- —
Ethylene glycol monobutyl ether, dms. c.l., dlvd E lb .22 - —
dms., t.c.l., dlvd. E lb .23½- —
tanks, dlvd E lb .19½- —
Ethylene glycol monoethyl ether, dms., c.l., dlvd. E lb .21 - —
dms., t.c.l., dlvd. E lb .22½- —
tanks, dlvd E lb .18½- —
Ethylene glycol monoethyl ether acetate, dms., c.l., dlvd. E lb .19½- —
dms., t.c.l., dlvd. E lb .20½- —
tanks, dlvd., E lb .17 - —
Ethylene glycol monomethyl ether, dms., c.l., dlvd. E lb .21 - —
dms., t.c.l., dlvd. E lb .22½- —
tanks, dlvd. E lb .18½- —
Ethylene glycol monomethyl ether acetate dms., c.l., dlvd. E lb .22 - —
dms., t.c.l., dlvd. E lb .23¾- —
tanks, dlvd E. lb .20 - —
Ethylene glycol monostearate, triple pressed, dms lb .33 - .35
Ethylene oxide, dms. c.l., dlvd. E. lb .21½- —
dms., t.c.l., dlvd. E. lb .24½- —
tanks, dlvd E. lb .15½- —
Ethylene trichloride (see Trichloroethylene)
Ethylenediamine, 85-88%, dms., c.l., dlvd. E., 100% basis lb .42 - —
dms., t.c.l., dlvd. E., 100% basis. lb .43 - —
tanks, dlvd. E., 100% basis lb .40 - —
Ethylvanillin, 100-lb. fib dms., 500-lb lots and over lb 6.75 - —
Eucalyptol, USP, cns., dms lb .85 - 1.40
Eucalyptus oil, NF rectified 70-75%, dms lb .48 - .70
NF, rectified 80-85%, dms lb .53 - .80
Eugenol, tech., dms. lb 1.45 - —
USP, dms. lb 2.15 - 3.00
Euphorbia herb, bls. lb .12 - .15

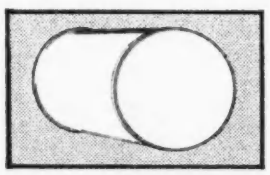
F

F salt, paste, tech., dms. works lb 2.30 - —
Feldspar, 140-200 mesh, bulk, c.l., works ton 19.50 - —
Feldspar in bags $3 per ton.
higher
Fennel oil, sweet, USP, cns. lb 2.25 - 2.70
Fennel seed, Argentine, bgs. lb .14 - —
French, light, bgs lb .20 - —
Indian, light, bgs lb .20 - —
Rumanian, bgs. lb .14 - —
Yugoslav, light, bgs lb .16½- —
Fenugreek seed, Moroccan, bgs lb .07½- —
Ferric chloride, anhyd., tech., dms., c.l., works 100 lbs 7.50 - —
dms t.c.l., works 100 lbs 8.50 - —
Indust., cryst., bnls., c.l., works. 100 lbs 5.25 - 6.75
bbls. t.c.l., works 100 lbs 5.75 - 7.25
42°Be., photo grade, cbys., c.l., works 100 lbs 7.25 - 8.25
sewage grade, tanks, frt equald, 100% basis 100 lbs 4.00 - —
USP, cryst., dms., t.l., works lb .08½- —
Ferric citrate, gran. dms. lb .86 - —
Ferric hypophosphite, NF dms lb 3.45 - —
Ferric naphthenate, liq., 6% Fe, dms., frt. alld lb .28¼- —
Ferric oxalate, tech., gran., 50-lb. dm. f.o.b. works E lb .89 - —
Ferric oxides (see iron oxides).
Ferric phosphate, NF soluble gran. pearls, cs lb .72 - .75
Ferric pyrophosphate, NF VII, soluble, gran., pearls, dms lb .79 - —
Ferric resinate 6¾% Fe., dms., ton, lots, frt. alld lb .36½- —
Ferric stearate, dms. c.l., frt alld. lb .39 - —
dms., t.c.l., frt. alld. lb .40 - .44
Ferric sulfate, partly hydrated, bgs., c.l. works ton 35.25 - —
bgs., t.c.l., works ton 36.25 -42.25
bulk, c.l., works ton 33.25 —
Ferric-ammonium citrate, brown, pearls, NF, gran., dms lb .65 - .68
Green, pearls, USP XII, gran., dms lb .66 - .69
Ferric-ammonium oxalate, fine gran., dms lb .27½- .29½
Ferric-potassium oxalate, fine gran., dms lb .32½- .34½
Ferric-sodium oxalate, fine gran., dms lb .27½- .29½
Ferrous gluconate, USP, 200-lb. dm., frt. equald lb .96 - —
Ferrous sulfate, gran., bgs., c.l., works ton 34.50 - —
bgs., t.c.l., dlvd. Metropolitan area, 100 lbs 3.35 - 4.25
bbls., c.l., works ton 40.00 - —
bulk, c.l., works ton 27.00 - —
USP, cryst., bbls., dms. lb 09½- .10
Fir balsam, Canada, bbls. gal 32.00 -35.00
Oregon, bbls. gal. 3.40 - 4.64
Fir oil, Canada, cns. lb. 1.75 - 2.50
Fish oil, refd., alkali, dms lb. .1300- .1350
Kettle-bodied, dms. lb. .1530- .1580
Light-pressed, dms. lb. .1150- .1200
tanks lb. .10 - —
Fishliver oil, high potency, 100,000 A units per gram, dms. 1,000,000 units. .16 - —
200,000 A units per gram, dms. 1,000,000 units. .17½- —
500,000 A units per gram, dms.,
Fishmeal, dom., menhaden, 60% protein, grd., bgs., Atlantic coast ton 118.00 -122.00
Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., Atlantic coast ton 114.00 -118.00
Fleaseed (see Psyllium seed).
Folic acid, USP, bots. fib dms., 1 kilo or more gram .30 - .44
10% feed grade, fib dms., 3 kilos or more kilo 30.00 -44.00
Formaldehyde, 37%, (inhibited 7 to 8% methanol), USP, dms, c.l., dlvd lb. .0670- —
tanks, dlvd. lb. .0405- —
Formaldehyde, 37%, (inhibited 12 to 15% methanol), USP, dms., c.l., dlvd lb. .0695- —
tanks, dlvd. lb. .0430- —
Formaldehyde, methanol-free (uninhibited) tanks, dlvd lb. .0375- —
Formic acid, 85% chys. c.l., works. lb. .1570- —
chys., t.c.l., works lb. .1620- .1720
90% chys., c.l., works lb. .1625- —
chys., t.c.l., works lb. .1675- .1775
Fringetree bark, bls lb. .70 - —
Fuller's earth, bgs., c.l., Ill. mines, ton 19.00 - —
Calcined, bgs., c.l., same basis. ton 20.00 -21.75
Insecticide grade, dried, powd., bgs., c.l., Ga. or Fla. mines. ton 17.50 - —
Oil-bleaching, grade, 100-mesh, bgs., c.l., same basis ton 16.30 -17.00
200-mesh, bgs., c.l., same basis. ton 17.50 -18.00
Spent, bgs., c.l., ship't point ton. 4.50 - 5.00
Fumaric acid, tech., 250-lb. dms., c.l., frt. alld. lb. .27¼- —
dms., t.c.l., same basis lb. .28¼- —
Prices of fumaric acid 1½c. per lb. higher west of Denver.
Furfural, dms., c.l. works lb. .13 - —
dms., t.c.l., works lb. .14 - —
tanks, dlvd. W lb. .13 - —
tanks, dlvd E lb. .12 - —
Furfural alcohol, cns., works lb. .29 - —
dms., t.c.l., Memphis, Tenn. lb. .21 - —
tanks, Memphis, Tenn lb. .184 - —
Furfuryl alcohol, dms. c.l. Newark, N J lb. .21½- —
dms. t.c.l., Newark, N. J. lb. .22½- —
Fusel oil, ref'd., dms., c.l., dlvd lb. .18 - —
dms., t.c.l., dlvd lb. .19½- —
tanks, dlvd. lb. .15½- —

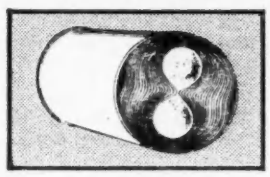
G

G salt, bbls. frt. alld., 100% basis lb. .73 - —
Gallic acid, NF VII, bbls. 1,000-lb. lots lb 2.00 - —
bbls., smaller lots lb 2.02 - 2.22
Tech., bbls., 1,000-lb. lots lb. 1.78 - —
bbls., smaller lots lb. 1.80 - 2.00
Gamma acid, dry grd., bbls., frt. Paste, bbls. frt. alld lb. 1.70 - —
Gammapicoline (see g-picoline).
Garlic oil, dom., bots. oz. 4.75 - 6.05
Imp., bots. oz. 4.50 - 5.00
Gaultheria oil (see Wintergreen oil).
Gelatin, edible, pure pork skin, 75 AOAC test, bbls. c.l. lb. .53 - —
150 AOAC test, bbls. c.l. lb. .62 - —
200 AOAC test, bbls. c.l. lb. .68 - —
225 AOAC test, bbls. c.l. lb. .70 - —
275 AOAC test, bbls., c.l. lb. .78 - —
Gelsemium root, bls. lb. .26 - —
Gentian root, bls. lb. .24 - —
Grd., bbls., bxs lb. .30 - —
Powd., bbls., bxs lb. .30 - —
Geraniol, extra, cns., dms lb. 2.00 - 3.65
Soap grade, dms lb. 1.05 - 1.30
Standard cns. dms. lb 2.00 - 3.40
Geranium oil, Algerian, cns. lb. 19.00 - —
Bourbon, cns. lb. 18.00 - —
Geranium oil, Turkish (see Palmarosa oil).
Geranyl acetate, cns. lb 1.90 - 2.70
Ginger oil, dist., bots lb. 10.50 -14.00

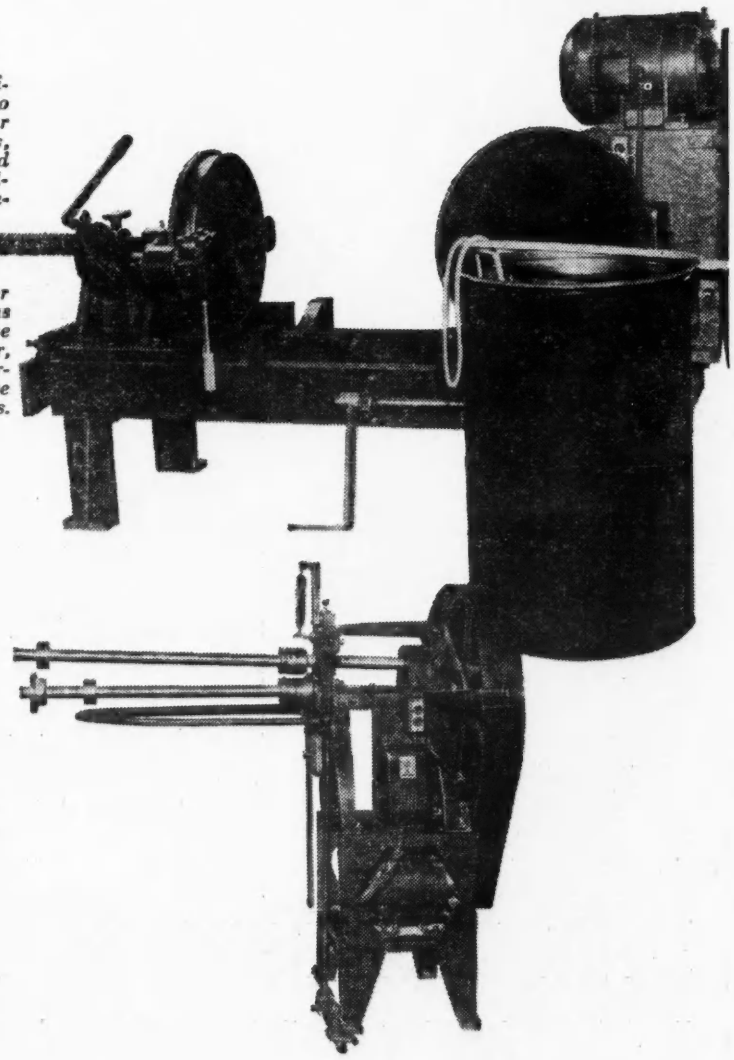
This equipment (leased free of charge and maintained by us) can save you up to 35% of your drum costs...



Drum shells are easily assembled into completed container with the bottoms, heads, gaskets and closing rings provided separately packaged.



Nested 25 to 40 per bundle, as many as 2,000 drums can be shipped in one car, stored in an area formerly used to store as few as 300 drums.



With these two pieces of equipment you can save on your drum costs three ways: lower freight cost, lower storage cost, lower purchasing cost. The freight rates on shipping unassambled drums is lower, giving you a lower unit cost at the beginning. Storage space can be reduced up to 80% with these KD drums because they are nested so that 25 to 40 drums can be stored in the same space previously required for one drum. This equipment, *provided at no cost to you*, makes it possible for you to buy larger quantities of full removable head drums at one time, realizing a quantity price saving. Available in 22 to 28 gauge steel, the bodies and all components are painted prior to shipment. The assembly and forming equipment is installed in your plant and an operator, trained by a Southern States engineer, can assemble drums as needed. For dry and semi-solid materials, this method is unexcelled for saving space and money. *Write today for complete information and testimonials of users.* There is no obligation.

SOUTHERN STATES CONTAINERS

DIVISION OF REYNOLDS ALUMINUM SUPPLY COMPANY

Since 1914

2830 Fifth Avenue, North | FAirfax 2-5461 | Birmingham, Alabama

Ginger oleoresin, NF, from African root, bots.	lb.	5.00	- 5.60
NF, from Jamaican root, bots.	lb.	7.75	- —
Ginger root, Cochin, bgs.	lb.	.16	- —
Jamaican, No. 3, bgs.	lb.	.32	- —
Nigerian, split, bgs.	lb.	.13	- —
Sierra Leone, bgs.	lb.	.19	- —
Glauber's salt (see Sodium sulfate).			
Gluconic acid, tech., 50%, dms., c.l., t.l., frt. alld.	lb.	.18	- —
dms. l.c.l., frt. alld.	lb.	.20½	- —
tanks, frt. alld.	lb.	.13½	- —
Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd.	lb.	.17	- —
95-121, bgs., c.l., dlvd.	lb.	.17	- —
122-149, bgs., c.l., dlvd.	lb.	.19½	- —
150-177, bgs., c.l., dlvd.	lb.	.22	- —
178-206, bgs., c.l., dlvd.	lb.	.24½	- —
207-236, bgs., c.l., dlvd.	lb.	.27	- —
237-266, bgs., c.l., dlvd.	lb.	.29	- —
267-298, bgs., c.l., dlvd.	lb.	.31	- —
299-330, bgs., c.l., dlvd.	lb.	.33	- —
331-362, bgs., c.l., dlvd.	lb.	.35	- —
363-394, bgs., c.l., dlvd.	lb.	.37	- —
395-427, bgs., c.l., dlvd.	lb.	.39	- —
428-460, bgs., c.l., dlvd.	lb.	.41	- —
461-494, bgs., c.l., dlvd.	lb.	.42	- —
495-529, bgs., c.l., dlvd.	lb.	.45	- —
Hide glue, l.c.l., prices 2c higher.			
Glue, bone, extracted, dry bone, 86 jellygrams, bgs. c.l., dlvd.	lb.	.16	- —
131 jellygrams, bgs., c.l., same basis	lb.	.16½	- —
164 jellygrams, bgs., c.l., same basis	lb.	.18½	- —
191 jellygrams, bgs., c.l., same basis	lb.	.19½	- —
222 jellygrams, bgs., c.l., same basis	lb.	.21	- —
Glue, bone, green, 40 jellygrams, bgs., c.l., same basis	lb.	.16	- —
86 jellygrams, bgs., c.l., same basis	lb.	.16	- —
115 jellygrams, bgs., c.l., same basis	lb.	.16½	- —
135 jellygrams, bgs., c.l., same basis	lb.	.17½	- —
164 jellygrams, bgs., c.l., same basis	lb.	.18½	- —
180 jellygrams, bgs., c.l., same basis	lb.	.19½	- —
200 jellygrams, bgs., c.l., same basis	lb.	.20½	- —
Bone glue, l.c.l., prices 2c, higher.			
l-Glutamic acid, 99½%, fib. dms., 100-lb lots, frt. alld	lb.	1.80	- —
fib. dms., 25-lb. lots, frt. alld.	lb.	1.88	- —
l-Glutamine, bots., 1-9 kilo lots,	kilo.	150.00	-300.00
50-kilo lots	kilo.	100.00	- —
500-kilo lots	kilo.	75.00	- —
Glycerine, dom., nat., crude, saponification, 88%, tanks, dlvd	lb.	.20½	- .21
nat., crude, soaplye, 80%, tanks, dlvd	lb.	.18½	- .19
Nat., refd., USP CP, 99%, dms., c.l., dlvd.	lb.	.30⅞	- —
dms., l.c.l., dlvd.	lb.	.31⅝	- —
tanks, dlvd.	lb.	.29⅛	- —
96%, dms., c.l., dlvd.	lb.	.30	- —
dms., l.c.l., dlvd.	lb.	.30¾	- —
tanks, dlvd.	lb.	.28¼	- —
Nat., high gravity, dms., c.l., dlvd.	lb.	.30¾	- —
dms., l.c.l., dlvd.	lb.	.31½	- —
tanks, dlvd.	lb.	.29	- —
Syn., dms., c.l., dlvd.	lb.	.31	- —
dms., l.c.l., dlvd.	lb.	.31¾	- —
tanks, dlvd.	lb.	.29¼	- —
Imp., nat., crude, soaplye, 80%, c.i.f.	lb.	.19	- .20½
Glycine (see Aminoacetic acid).			
Glycerol (see Glycerine).			
Glycolic acid (see Hydroxyacetic acid).			
Glyoxal, 30%, dms., c.l., works	lb.	.20½	- —
dms., l.c.l., works	lb.	.21¼	- —
tanks, works	lb.	.18	- —
Golden seal root, NF, tested, bls.	lb.	2.75	- 3.25
Gramicidin, 1 to 5 kilos, f.o.b. works,	gram.	4.70	- —
Grapefruit oil, dms.	lb.	1.95	- 2.50
Graphite, amorp, powd., bgs., fib. dms., ex whse	lb.	.06	- .09½
cryst., 88-90%, powd., bgs., fib. dms. ex whse	lb.	.19	- .21½
cryst., 90-92%, ex whse.	lb.	.21	- .24½
powd., bgs., fib. dms., ex whse.	lb.	.29	- .31½
Graphite, flake, No. 1, 90-95%, bgs., fib. dms., ex whse	lb.	.29	- .31
No. 2, 90-95%, bgs., fib. dms., ex whse	lb.	.29	- .31
Grease, white, choice all hog, tanks, dlvd.	lb.	.06⅝	- .06¾
Yellow, tanks, dlvd.	lb.	.05⅛	- .05¼
Grease oil, No. 1, dms., c.l.	lb.	.14¾	Nom.
dms., l.c.l.	lb.	.15¾	Nom.
	lb.	.17¼	Nom.
Extra winter strained, dms., c.l.	lb.	.17¼	Nom.
dms., l.c.l.	lb.	.18¼	Nom.
Prime, burning, dms., c.l.	lb.	.18¾	Nom.
dms., l.c.l.	lb.	.19¾	Nom.

GREEN PIGMENTS

Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

Grindelia robusta herb, bls.	lb.	.45	- —
Guaiacol, NF, cryst., dms., tins.	lb.	2.10	- 2.15
NF, liq., cbys., dms.	lb.	2.30	- 2.40
Guaiacol carbonate, NF VII, dms.	lb.	3.40	- 3.45
Guaiacwood oil, cns.	lb.	.75	- 1.30
Guar gum, food grade bgs., c.l.	lb.	.38	- —
bgs., 5,000 lbs. or more	lb.	.39	- —
Indust., bgs., c.l.	lb.	.32	- —
Tech. grade, bgs.	lb.	.30	- .33

GUMS

Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

Gypsum, plaster of Paris, 100-lb. paper bgs., trucks, dlvd. New York	ton.	20.30	- —
Terra alba, dom., 100-lb. paper bgs., trucks, same basis	ton.	20.00	- —
100-lb. paper bgs., trucks, works, New York	ton.	17.00	- —
Terra alba, imp., English, 100-lb. paper bgs., l.c.l., ex dock, New York	ton.	55.00	- —
100-lb paper bgs., ex whse.	ton.	60.00	-62.00

H

H acid, dry, bbls., c.l., frt. alld., 100% basis	lb.	.90	- —
bbls., l.c.l., same basis	lb.	.95	- —
Hansa yellow, 10 G, bbls., dlvd. E. of Rockies	lb.	2.45	- —
Hansa G yellow, pigment, bbls.	lb.	2.20	- —
Hawthorn berries, bgs.	lb.	.18	- .20
Heliotropin, 100-lb. lots, dms.	lb.	2.60	- 3.40
Hellebore root, dom., green, bls	lb.	.70	- .75
Helonias root, bls.	lb.	1.50	- —
Hemlock oil, cns.	lb.	2.55	- 3.00
Henbane leaves, bls.	lb.	.30	- .35
Heptachlor, dms., c.l., t.l., 100% basis, frt. allo to.	lb.	.98	- —
Heptane, indust., tanks, Bayonne, N. J.	gal.	.20	- —
tanks, Baytown, Tex.	gal.	.16¼	- —
tanks, Borger, Tex.	gal.	.16¼	- —
tanks, Houston, Tex.	gal.	.16¼	- —
Hesperidin, purif., 100-lb. fib. dms., f.o.b., works	lb.	8.95	- —
Hesperidin methylchalcone, bots., 50-lb. lots, works	lb.	22.50	- —
bots., 5-lb. lots, works	lb.	23.00	- —
bots., 1-lb lots, works	lb.	23.50	- —
Hexachloropnene, dms., 1,100 lbs., or more	lb.	1.84	- —
dms., to 1,100 lbs.	lb.	1.94	- —
Hexalin (see Cyclohexanol).			
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or New York City	lb.	.233	- —
bgs., 1,000-19,999-lb. lots, same basis	lb.	.243	- —
bgs., smaller lots same basis	lb.	.253	- —
fib. dms., 1,000-lb. lots or more, same basis	lb.	.250	- —
fib. dms., smaller lots, same basis	lb.	.253	- —
USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd. New York City and Philadelphia.	lb.,	42½	- —
bgs., smaller lots same basis	lb.	.43½	- .48⅛
Hexane, indust., tanks, Bayonne, N. J.	gal.	.20	- —
tanks, Borger, Tex., dlvd.	gal.	.16	- —
tanks, Houston, Tex.	gal.	.16	- —
1-Hexanol, dms., c.l., works	lb.	.35	- —
dms., l.c.l., works	lb.	.35¾	- —
tanks, works	lb.	.33	- —
Hexyl cinnamic aldehyde, dms.	lb.	4.00	- 7.50
n-Hexyl methacrylate, dms., c.l., works	lb.	.75½	- —
dms., l.c.l., works	lb.	.76	- —
Hexyl salicylate, dms.	lb.	1.75	- —
Hexylene glycol, dms., c.l., dlvd	lb.	.17½	- —
dms., l.c.l., dlvd	lb.	.19	- —
tanks, dlvd.	lb.	.15	- —
Hexylresorcinol, USP dms., 25-lb. lots or more, dlvd	lb.	14.00	- —
dms., smaller lots, dlvd.	lb.	14.50	- —
Homatropine hydrobromide, USP, bots.	oz.	3.50	- —
Homatropine methylbromide, USP, bots.	oz.	3.25	- —
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago, unit-ton		6.75	- —
Horehound herb, bls.	lb.	.16	- .19
Hydrastis (see Goldenseal).			
Hydrazine hydrate, 85% ret. dms., works	lb.	1.35	- 1.55
100%, ret. dms., works	lb.	1.60	- 1.90
Hydriodic acid, 1.50 s.g., cbys.	lb.	2.92	- —
1.70 s.g. cbys.	lb.	3.23	- —
Hydroabietyl alcohol, tech., solid, dms., c.l., dlvd. zone 1	lb.	29¼	- —
dms., l.c.l., dlvd zone 1	lb.	.29¾	- .30¼
tanks dlvd zone 1	lb.	27¼	- —
Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo., and the western part of Texas.			
Hydrobromic acid, medicinal, 48%, cbys. frt. equald	lb.	.48	- .56
Hydrochloric acid, anhyd. (see Hydrogen chloride)			
Hydrochloric acid, 18°, cbys., c.l., works 100 lbs.		2.50	- —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs.		2.90	- 3.05
tanks, works, frt. equald	ton.	28.00	- —
20°, cbys., c.l., works 100 lbs.		2.75	- —
cbys., l.c.l., dlvd. Metropolitan area 100-lbs		3.15	- —
tanks, works frt. equald	ton.	30.00	- —
22°, cbys., c.l., works 100 lbs.		3.25	- —
cbys., l.c.l., dlvd. Metropolitan area 100 lbs.		3.65	- —
tanks works frt. equald	ton.	35.00	- —
CP, USP, consumers cbys., extra, c.l., works	lb.	.15¾	- —
cbys., l.c.l., same basis	lb.	.17¼	- .17¾

Which of these 3 products and services can you use from BECCO?

New Cold Caustic Bleach Process

Looking for a way to use greater amounts of low-cost, more plentiful pulp—without capital investment for bleach equipment? Then let a Becco Sales Engineer show you our new technique* which allows you to bleach in the same equipment regularly used for the manufacture of cold caustic pulp.

In this new process, peroxide bleach liquor is added at the Bauer Refiner, and bleaching occurs during the refining operation. Bleach response depends on refiner densities.

Up to 20 points brightness increase has been obtained in commercial operations to date, and with no additional steam costs, no holding time, and no excessive chemical costs.

Becco can assist you immediately in setting up a production run and evaluating results. First step: use the coupon to let us know you're interested.

*—Patent Pending

BECCO

BECCO CHEMICAL DIVISION, FMC
Station B, Buffalo, New York
Dept. OPDR-H

Gentlemen:
Please have a Sales Engineer give me more information on Becco's Cold Caustic Bleach Process.

NAME_____
FIRM_____
ADDRESS_____
CITY_____
ZONE____ STATE_____

Problems in handling Hydrogen Peroxide

?

Becco's Four-Fold Engineering Service Program—offered free—includes:

1. Comprehensive survey of your facilities.
2. Specific proposal with recommendation of proved equipment and where it is obtainable.
3. Installation supervision by Becco.
4. Periodic inspection and permanent service.

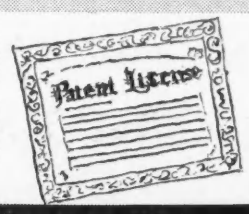
Can you use this free Becco help, based on more years of experience with bulk handling of H_2O_2 than any other manufacturer? Use the coupon to let us know.

BECCO

BECCO CHEMICAL DIVISION, FMC
Station B, Buffalo, New York
Dept. OPDR-B

Gentlemen:
Please tell me more about your Four-Fold Engineering Service.

NAME_____
FIRM_____
ADDRESS_____
CITY_____
ZONE____ STATE_____



"Enclosing $1.00 — Send Patent License"

Well, perhaps there's a little more to your gaining use of Becco patents than just mailing your dollar in, but not much more. And certainly, no more money. The $1.00 really does cover it.

Becco has lots of patents, granted as a result of innovations in the use of Hydrogen Peroxide and other Peroxygen chemicals developed in Becco's Research Laboratories. But they don't do us a whole lot of good locked tightly in our safe. So, we long ago adopted the following policy:

If one of our patents can help you, we'll be glad to license the rights to you **perpetually**, for just one dollar. You get a nice certificate, incidentally, to cover the legalities, but more important—you also get free our complete engineering help in setting up your process, handling the material, maintenance, etc., etc.

What do we get? You as a customer—we hope—but there's no obligation on your part. Just seems to work out that way, though—when we know enough about a particular peroxygen to hold a patent on its use, chances are we've also learned enough to produce it purer than anyone else. You benefit from this; we do, too.

Use the coupon below to ask for a Sales Engineer—or our list of patents—that may help you solve an important problem.

BECCO

BECCO CHEMICAL DIVISION, FMC
Station B, Buffalo, New York
Dept. OPDR-F

Gentlemen:
Please send your list of patents available on the use of
- ☐ Hydrogen Peroxide
- ☐ Peroxygen Chemicals
- ☐ Persulfate Chemicals
- ☐ Please have a Sales Engineer call.

NAME_____
FIRM_____
ADDRESS_____
CITY_____
ZONE____ STATE_____

Hydrochloric acid, 5 pint bots., extra ca. c.l., same basis lb. .20¾- —
Hydrocortisone acetate bulk bots., kilo lots or more gram. 1.15 - 1.20
Hydrocortisone alcohol bulk bots., kilo lots or more gram. 1.15 - 1.20
Hydrocyanic acid, dilute, NF, 2%, 5-lb bots lb. .40 - —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride)
Hydrofluoric acid, aqueous, 70%, 55-gal dms., c.l., t.l., dlvd. 100 lbs. 19.25 - —
55-gal dms., l.c.l., t.t.l., dlvd. 100 lbs. 20.75 - —
20-gal dms., c.l., t.l., dlvd. 100 lbs. 21.00 - —
20-gal dms., l.c.l., t.t.l., dlvd. 100 lbs. 22.50 - —
tanks, works, frt. equald. 100 lbs. 15.50 - —
Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming. In those states add $2.70 per cwt. for drum delivery.
Hydrofluosilicic acid, dms., works, 30% basis lb. .06 - —
Hydrofuramide, dms., fib. ctns., works lb. .30 - .40
50-lb. cyls., l.c.l., works lb. .55 - .60
Hydrogen chloride, anhyd., 50-lb. cyls., l.c.l., works lb. .45 - —
Hydrogen cyanide, liq., 98%, tanks, works lb. .14 - —
Hydrogen fluoride, anhyd., cyls., dlvd. E lb. .30½- .32½
cyls. dlvd. W. lb. .39 - —
tanks, works lb. .21 - —
Hydrogen peroxide 35%, dms., c.l., dlvd lb. .202 - —
dms., l.c.l., dlvd. lb. .211 - —
tanks, dlvd. lb. .1800- —
Hydroquinone, photo grade, dms. lb. 1.10 - 1.13
Tech., dms., c.l., dlvd. lb. .82½- —
dms., l.c.l., dlvd. lb. .84½- —
Hydroxyacetic acid, tech., 70%, dms., Philadelphia and Chicago lb. .11 - —
tanks, Belle, W. Va. lb. .073 - —
Hydroxycitronellol, cns. lb. 3.75 - —
Hydroxyethyl cellulose, low viscosity grades, fib. dms., 20,000-lb. lots or more, f.o.b. shipping point. lb. .96 - —
fib. dms., 2,000 to 19,999-lb. lots, same basis lb. .99 - —
fib. dms., 150 to 1,999-lb. lots, same basis lb. 1.02 - —
fib. dms., less than 150-lb. lots, same basis lb. 1.12 - —
Hydroxyethyl cellulose high viscosity grades, fib. dms., 20,000-lb. lots or more, f.o.b. shipping point. lb. 1.01 - —
fib. dms., 2,000 to 19,999-lb. lots, same basis lb. 1.04 - —
85 to 1,999-lb. lots, fib dms., same basis lb. 1.07 - —
fib. dms., less than 85-lb. lots same basis lb. 1.17 - —
Hyoscine salts (see Scopolamine)
Hyoscyamine hydrobromide, bots oz. 7.00 - —
Hyoscyamine sulfate, bots. oz. 7.00 - —
Hypophosphorous acid, purif. 50% cbys., ton lots, f.o.b. works lb. .85 - —
NF, 30%, cbys., all quantities, same basis lb. .75 - —

I

Ichthammol, NF, dms. lb. .75 - 1.08
Indigo (see Dyes coaltar, 1171 indigo, syn).
Indole, CP, bots. lb. 14.75 - 18.25
Inositol, bots., dlvd. lb. 5.00 - —
dms., dlvd. lb. 4.50 - 4.75
Insect flowers (see Pyrethrum).
Iodine, crude, kgs. lb. .95 - —
Resub., USP, dms., f.o.b. works lb. 2.00 - 2.02
Iodochlorohydroquinolin, USP, dms. lb. 3.60 - —
Iodoform, NF, dms., kgs. lb. 4.90 - 5.00
a-Ionone, cns. lb. 3.85 - 5.00
b-Ionone, cns. lb. 3.85 - 5.85
Ipecac root, whole, bgs lb 8.00 - 8.50
Powd., bbls., bxs. lb. 9.50 - 10.00
Irish moss, bleached, prime, bls lb. .22 - .25
Iron blue, alkali-resisting, bbls., c.l., dlvd. E lb. .57 - —
bbls., l.c.l. ton lots same basis. lb. .58 - —
bbls., smaller lots same basis lb. .59 - —
Iron blue, dom., reg., bbls., c.l., dlvd E lb. .52 - —
bbls., l.c.l., ton lots, same basis lb. .53 - —
bbls., l.c.l., smaller lots, same basis lb. .54 - —
Iron blue, imp., British, reg., bbls., c.l., dlvd. E lb. .48 - —
bbls., l.c.l., ton lots, same basis lb. .49 - —
bbls., l.c.l., smaller lots, same basis lb. .50 - —
Iron blue dlvd. prices 1c. higher for Pacific Coast states:—Wash., Ore., Cal., N. M., Ariz., Mon., Wyo., Utah, Col. and Nev.
Iron compounds (see Ferric or Ferrous).
Iron oxide, black, pure, bgs., c.l., works lb. .14¾- —
bgs., l.c.l., works lb. .15 - —
Iron oxide, brown, pure, bgs., c.l., works lb. .14¼- —
bgs., l.c.l., works lb. .14½- —
Iron oxide, metallic, brown, bgs., works lb. .05¼- —
Iron oxide, Persian Gulf, red, bgs., c.l., works lb. .08¾- —
Iron oxide, red, dom., pure, bgs., Bethlehem Easton E. St. Louis, New York City lb. .14¼- —
Iron oxide, red, nat. 75-85% ferric oxide, bgs., c.l., works lb. .06¼- —
bgs., l.c.l., works lb. .06½- —
Iron oxide, Spanish red, bbls., c.l., ex dock lb. .05¾ Nom.
bbls., l.c.l., ex dock lb. .06 Nom.
bbls., l.c.l., ex whse New York, lb. .06½ Nom.
Iron oxide, yellow, nat., French type, bgs., c.l., works lb. .06¼- —
Peruvian type bgs. l.c.l lb. .023 - .024
Iron oxide, yellow, pure, light lemon shade bgs. c.l. works lb. .12¼- —
Other shades, same basis lb. .12 - —
Isoamyl alcohol, dms. c.l., works, frt alld E lb. .27½- —
dms., l.c.l., same basis lb. .29 - —
tanks, same basis lb. .25 - —
Isoborneol, cns. lb. 1.44 - 1.80
Isobornyl acetate, cns. lb. .48 - .56
Isobornyl formate, dms. lb. 1.20 - —
Isobornyl proprionate, dms. lb. 1.25 - 1.35
Isobutyl acetate, perfume grade, cns lb. .35 - —
Isobutyl acetate, solvent grade, dms., c.l., dlvd. E. of Rockies lb. .15¼- —
dms., l.c.l. same basis lb. .16¾- —
tanks, same basis lb. .12¾- —
Isobutyl alcohol, dms., c.l., dlvd. lb. .15½- —
dms., l.c.l., dlvd. lb. .17 - —
tanks, dlvd. lb. .13 - —
Isobutyraldehyde, CP, dms., c.l., dlvd lb. .27½- —
dms., l.c.l., dlvd lb. .28½- —
Tech., dms., c.l., dlvd. lb. .22 - —
dms., l.c.l., dlvd. lb. .23 - —
tanks, dlvd. lb 19¼- —
Isoeugenol, cns. lb. 3.40 - 4.25
Isoniazid, powd., bulk, kilo or more kilo. 18.00 - —
Isonicotinic acid, 100-lb fib dms., works lb 4.25 - —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms., c.l., dlvd E. lb. .23½- —
dms., l.c.l., dlvd E lb. .25 - —
tanks, dlvd E. lb. .21 - —
Isopentane, comi. grade, tanks, f.o.b. Tex refy gal. .15½- —
Isophthalic acid, dms. c.l., works, frt. equald lb. .152 - —
dms., l.c.l. same basis lb. .162 - —
Isopropanol (see Isopropyl alcohol).
Isophorone, dms., c.l., works lb. .24¼- —
dms., l.c.l., works lb. .25¼- —
tanks, works lb. .22½- —
Isopropyl acetate, dms., c.l., dlvd. lb. .14 - —
dms, l.c.l., same basis lb. .15½- —
tanks, same basis lb. .11½- —
Isopropyl alcohol, refd., 91%, dms., c.l. dlvd gal. .58 - —
dms., l.c.l., dlvd gal. .68 - —
tanks, dlvd. lb. .42 - —
Refd., 95%, c.l., dem., dlvd. gal. .60 - —
dms., l.c.l., dlvd gal. .70 - —
tanks, dlvd gal. 44 - —
anhyd., c.l., dlvd. gal. .62 - —
dms., l.c.l., dlvd gal. .72 - —
tanks, dlvd gal. .46 - —
Isopropyl benzene (see Cumene).
Isopropyl ether, dms., c.l., dlvd lb. .09½- —
dms., l.c.l., dlvd lb. .11 - —
tanks, dlvd lb. .07 - —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC), tech., dms., c.l., t.l., works lb 1.00 - —
dms., l.c.l., works lb. 1.05 - 1.25
tanks, works lb. .99 - —
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works lb. .75 - —
450-lb. fib. dms., l.c.l., works lb. .80 - .90
Isoquinoline, dms., works lb. .65 - 1.25
Itaconic acid, refd., bgs. c.l., f.o.b. works lb. .53½- —
bgs., l.c.l., same basis lb. .54½- —
Tech., bgs., c.l., same basis lb. .38½- —
bgs., l.c.l., same basis lb. .39½- —

J

J acid, paste, bbls., works, 100% basis lb 2.70 - —
Powd., bbls., same basis lb. 2.75 - —
Jalap root, NF, bls. lb. .90 - —
NF, powd., bbls., bxs. lb. 1.15 - —
Japan wax, cs lb. .27 - .29
Juniper berries, bgs lb. .16 - .17
Juniper berry oil, bots. lb 2.90 - 3.75
Twice rectified bots. lb. 3.25 - —
Juniper tar oil NF dms lb. .42 - .60
Juniper wood oil, tech., cns. lb. .38 - .55

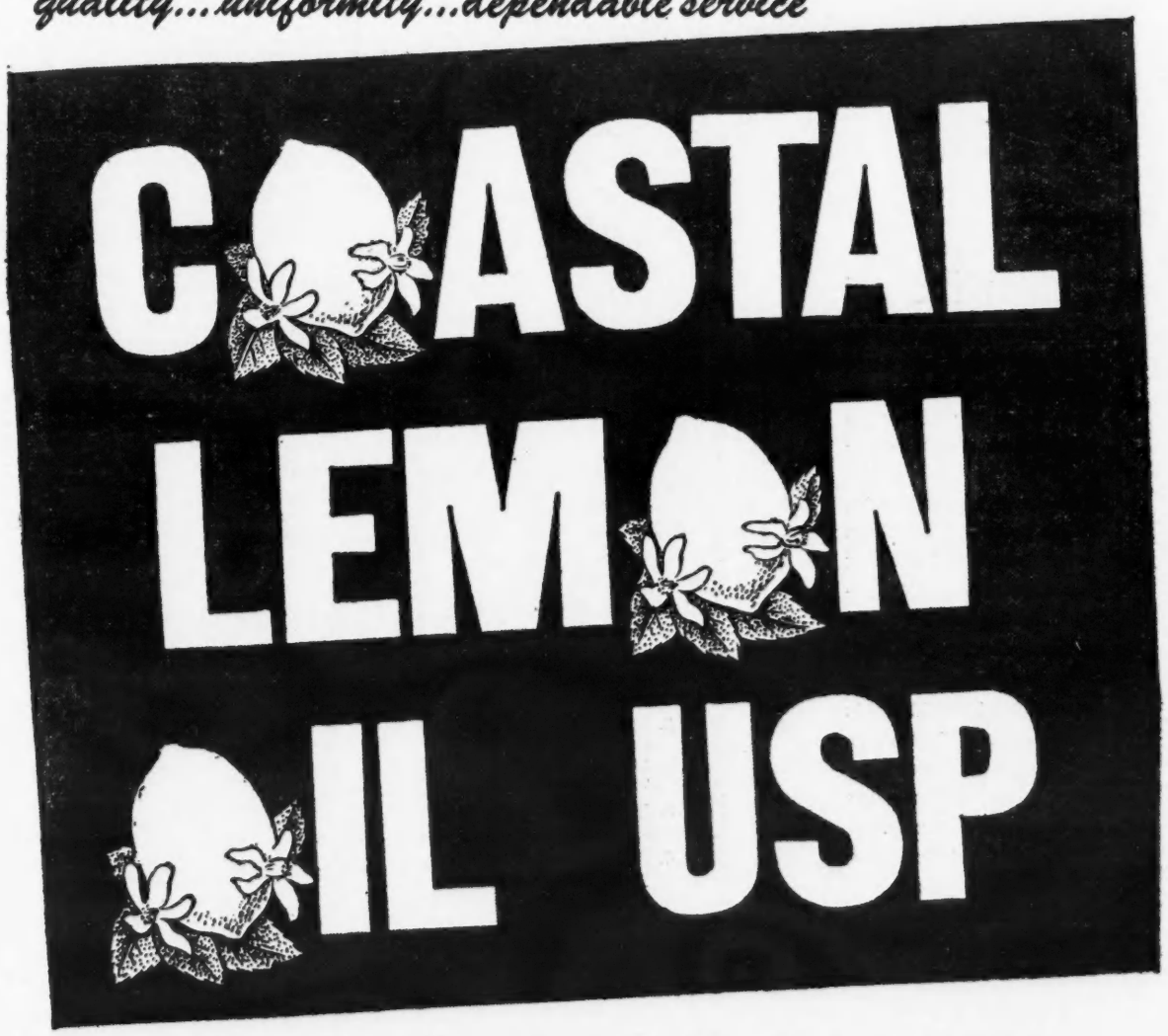
K

Kaolin (see also Clay, China).
Kaolin, NF, powd., fib. dms. lb. .10 - .12
NF, colloidal, 50-lb. bgs. lb. .15½- .17⅛
Karaya gum No. 1, NF powd. bls lb. .45 - .48
No. 2, powd., bbls. lb. .40 - .42
No. 3, powd., bbls lb. .35 - .37
Koch acid, bbls., frt. alld., 100% basis lb. 1.00 - —
Kola nuts, bgs. lb. .10 - —

L

L acid, bbls., works lb. 1.38 - —
Lacquer diluent, petroleum, 150°-240° F. b.r., tanks, east coast, N.J. N.Y. gal. .20 - —
Petroleum, 150°-240° F. b.r., tanks, west coast, ex tax, Los Angeles gal. .174 - —
Benzene type, tanks, group 3 gal. .15125- —
Toluene type tanks group 3 gal. .14375- —
tanks, Houston, Tex gal. .16 - —
Lactic acid, edible, 50%, bbls, dms., c.l., frt. equald lb. .1985- —
bbls., dms., 20 or more frt. equald lb. .2035- —
bbls. dms. 5 to 19 frt. equald lb. .2085- —
bbls., dms., 1 to 4, frt. equald. lb. .2135- —

quality...uniformity...dependable service



PURE California cold pressed lemon oil produced under continuous scientific quality control . . . bulk blended for uniformity, from desert and coastal grown lemons . . . packaged in tamper-proof containers for your protection . . . and priced to save you money. Our research and laboratory facilities have helped many users with product improvement and cost reduction...perhaps we can help you.

VENTURA PROCESSORS, Ventura, California

DISTRIBUTED BY:

International Flavors & Fragrances, Incorporated
417 Rosehill Place, Elizabeth 2, New Jersey

R. D. Webb & Co., Inc., 137 Boston Post Road, Cos Cob, Connecticut

Ventura Processors, 2325 Vista Del Mar Drive, Ventura, California

Lactic acid, 80%, bbls., c.l., dms., frt. equald . lb. .3335- —
bbls., dms., 20 or more, frt. equald lb. .3335- —
bbls. dms 5 to 19 frt. equald. lb. .3435- —
bbls. dms., 1 to 4 frt equald. lb. .3485- —
Plastic grade, 50%, c.l., bbls., works lb. .2740- —
bbls. 20 or more works lb. .2790- —
bbls., 5 to 19, works lb. .2840- —
bbls., 1 to 4, works lb. 2890- —
80%, bbls., c.l works lb. .4625- —
bbls. 5 to 19 works lb .4725- —
bbls. 1 to 4, works lb 4773- —
Tech., 44% bbls. c.l. works 100 lbs. 12.45 - —
bbls., l.c.l., works .. 100 lbs. 12.85 - —
USP, 85% chys lb .85 - —
Lactose, crystalline edible, bgs., 23,000-lb lots frt equald lb. .14 - —
bgs., 6,000-lb lots, frt equald lb. .14½- —
bgs., 2,000-lb lots, frt equald lb. .14¾- —
bgs., 200-lb lots frt equald lb 15¼- —
Edible lactose in fib dms. ½c higher
Lactose, ferment grade bgs., c.l., works lb 08½- —
USP, reg., fib. dms., 30,000-lb. lots, frt. equald lb. .21½- —
fib. dms. 2,000-lb lots, frt. equald lb .22¼ —
200-1,880-lb. lots, frt. equald lb. .22¾- —
USP lactose in bags 1/2c to 1c lower
Lactose, USP spray dried, bgs., t.l., frt. equald lb. .18½- —
bgs. c.l., frt equald lb .19 19¾
Lady's slipper root, bls lb 3.50 3.75
Lake C red toner alizarine bbls., works lb 1.25 - —
Lamp black, bgs. c.l., works lb .46 - .45
Lanolin cosmetic dms., works lb .27 .29
USP, anhyd dms. works lb .24 .26
USP, hydrous, dms., works .. lb. .23 .25
Lard, cash, dms., Chicago ..... lb. .07⅞- —
Lard oil (see grease oil)
Larkspur seed bgs ..... lb. .55 —
Laurel leaf oil dms cns ..... lb 9.75 - 12.50
Laurent's acid, bbls ..... lb. .70 —
Laurie acid, pure, dms ..... lb. .38½- .41
tanks ..... lb. .36 - .37
Lauryl alcohol, bots lb 2.00 2.50
n-Lauryl methacrylate, dms., c.l., t.l. works lb 65½ —
dms., t.l., works lb .66 —
Lavandin oil, 22 24%, dms. ..... lb 1.10 - 1.50
Abrial dms lb 1.00 1.50
Lavender flowers medium bls lb 55 - .60
Ord., bls lb 20 .25
Select., bls lb 90 1.00
Lavender flower oil USP French 35-37% ester, cns lb. 1.85 - 4.00
40-42% ester cns lb 5.00 7.75
Spike, Spanish, cns lb 2.20 3.00
Lead acetate NF cryst gran., powd., bbls lb. .24½- —
White, cryst. bbls lb .25½ —
gran., bbls lb. 26½ —
powd. bbls lb. .25½ —
Lead arsenate acid powder dealers, 3-50 lb. bgs or any quantity, frt alld on $150 or more lb. .30½- —
1-lb bgs same basis lb. .47 - —
Lead, blue basic sulfate bbls. c.l., shipt point frt alld lb. .17 - —
bbls. l.c.l. same basis lb. .18 - —
Lead carbonate (see Lead, white, basic carbonate)
Lead chloride, dms lb .52 - —
Lead iodide NF v jars lb 3.82 - —
Lead linoleate fused 26% Pb dms. lb. .38 - —
Lead metal prime pigs New York, lb. .13 - —
St. Louis lb. .1280- —
Lead monosilicate bgs., c.l., works, frt. equald lb. .143 - —
bgs. l.c.l. same basis lb. .153 - —
Lead naphthenate liq., 16% Pb, dms. divd lo. .19½- —
24% Pb. dms., divd lb. .24¼- —
Solid, 37% Pb dms. divd. lb. .31¾- —
Lead nitrate, bbls lb. .24¼- .26¾
Lead orthosilicate-gel, 50-60% PbO, dms. works lb. .29¾- .34¼
Lead peroxide, tech powd. bbls lb. .45 - .50
Lead phthalate dibasic dms. works, lb .41 - —
Lead, red, 95% Pb O or less, bbls., c.l. works, frt equald lb. .15¼- —
bbls., l.c.l., same basis lb. .16¾- —
97% Pb_3O_4, bbls., c.l., same basis, lb. .1545- —
bbls., l.c.l., same basis .. lb. .1645- —
98%, Pb_3O_4, bbls., c.l., same basis lb. .1560- —
bbls., l.c.l., same basis .. lb. .1660- —
Lead resinate precip 23% Pb, dms., ton lots, divd lb. .40¼- —
Lead salicylate normal dms. works, lb. .46 —
Lead silicate (see Lead white basic silicate).
Lead silico-chromate, bgs., c.l., f.o.b. mfrs. point, frt. alld lb. .20 - —
bgs., l.c.l., same basis lb. .21 - —
Lead sulfate (see Lead blue basic sulfate).
Lead tallate, liq., 16% Pb. dms lb. .15 - —
24% Pb. dms lb. .21¼- —
Solid, 30% Pb. dms lb. .23¼- —
Lead, white, basic carbonate, bgs., c.l., shipt. pt. frt. alld lb. .18 - —
bgs., l.c.l., same basis .. lb. .19 - —
Lead, white basic silicate, bgs., c.l., shipt. pt. frt. alld lb. .16½- —
bgs., l.c.l., same basis .. lb. .17½- —
Lead, white basic sulfate bgs., c.l., shipt. pt., frt. alld lb. .17 - —
bgs. l.c.l., same basis .. lb. .18 - —
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works, lb. .14 - .15
non-ret. dms., l.c.l., same basis lb. .15 - .16
unbleached, non-ret. dms., c.l., same basis lb. .13 - .14
non-ret. dms. l.c.l., same basis lb. .14 - .15
Lemon bioflavoroid complex, 100-lb. fib. dms., works lb. 7.70 - —
Lemon oil, USP Calif cns., dms. lb. 3.10 - 3.50
Messina, cns. lb. 3.75 - 5.00
Lemongrass oil, cns., dms. lb. 1.75 - —
dl-Leucine, dms. works lb. 12.25 - 15.00
Licorice root, gran., bls. ..... lb. .13 - —
Powd., bls. ..... lb. .15 - .16
Whole, bls ..... lb. .09 - .10
Lignaloe wood oil, Mexican, cns lb 2.75 - 3.50
Lignosulfonate (see under ammonium or sodium lignin sulfonate)
Lime, chemical (quicklime), bulk, c.l., 50,000 lbs., works, E. ton 14.25 - —
Chemical, hydrated, bgs., c.l., same basis ton 17.25 - —
Chemical, spray, bgs. c.l., same basis ton 18.25 - —
For New York delivery, add $6.29 freight charge.
Lime oil, dist., Mexican, cns .... lb. 5.90 - 6.75
West Indian, cns ..... lb 6.50 7.80
Expressed, West Indian, cns lb. 7.75 - 8.75
Lime salts (see Calcium).
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).
Linalool, ex bois de rose oil, dms. lb. 2.90 - 3.75
Syn., 93-100%, dms., works .... lb. 3.20 - 3.80

Linalyl acetate, ex bois de rose, 90-92%, dms . lb. 3.05 - 3.75
96-98% dms. ..... lb. 3.60 - —
Syn., 98-100%, dms., works .. lb. 3.40 - —
Lindane, 25% formulation to distributors dms., frt alld lb 1.35 - 1.50
Lindane, tech. to formulators, dms. 1-2,000 lbs. divd lb 2.40 - —
Linden flowers, with leaves, bls lb 25 - —
Without leaves, bls lb. .35 - .40
Linseed meal, expeller 32% bulk, Minneapolis, mills ton. 78.50 Nom.
Extracted, 34% bulk same basis ton. 73.00 - —
Linseed oil, raw, dms., c.l., New York lb. .1800- —
dms., l.c.l., New York .... lb. .1900- .1950
tanks, f.o.b., Minneapolis .... lb. .1450- —
tanks, New York ..... lb. .1600- —
tankwagon, New York ..... lb. .1650- .1660
Boiled linseed oil, .006c. per lb. higher.
Linseed oil acid, dist., dms. ..... lb. .2050- —
Water-white, dms. ..... lb. .2350- —
Litharge coml., powd., bbls., c.l., works, frt. equald lb. .14¾- —
bbls., l.c.l., same basis .. lb. .15¾- —
Lithium aluminum hydride, fump, dms. works lb. 33.00 - 39.00
Lithium benzoate, dms lb 1.65 1.67
Lithium bromide, NF, gran. works frt. equald lb 2.60 - —
Lithium carbonate, NF, dms., c.l., t.l., divd lb 1.29½- —
dms., ton lots to t.l., divd lb 1.30 - 1.30½
Tech., dms., c.l., t.l., frt alld lb. .67 - —
dms., ton lots, same basis lb. .73 - —
dms., smaller lots, same basis, lb. .79 - —
Lithium chloride, CP, anhyd., dms., ton lots lb. 1.23½- —
Tech. anhyd., dms., c.l., t.l., divd, or works, frt. alld lb. .87 - —
dms., l.c.l., same basis .... lb. .88 - .92

Lithium citrate, NF, dms., ton lots, lb. 1.50 - —
Lithium fluoride, dms., 20,000-lb. lots, divd lb 2.15 - —
bbls., ton lots and more, divd. lb 2.18½- —
bbls., less ton lots, divd. ..... lb. 2.23½- —
Lithium hydride, powd., dms., 500-lb. lots or more, works lb. 9.50 - —
Lithium hydroxide, monohydrate, dms., c.l., t.l., frt. alld lb. .72 - —
dms., l.c.l., frt. alld. ..... lb. .73 - —
Lithium manganite, dms., works, lb. .95 - 1.05
Lithium nitrate, tech., dms., 100-lb. lots lb. 1.15 - 1.25
Lithium salicylate, dms. ..... lb. 1.60 - 1.70
Lithium silicate, dms., works .. lb. 1.10 - 1.20
Lithium stearate, dms., c.l., works, lb. .47½- —
dms., ton lots, works ..... lb. .48½- —
dms., less-ton lots, works ..... lb. .53½- —
Lithium sulfate, dms., 100-lb. lots, lb. 1.15 - 1.25
Lithium titanate, dms., works ... lb. 1.15 - 1.25
Lithol red toner, barium, bbls., works lb. .98 - —
Lithol-rubine red toner, pure bbls., works lb. 1.50 - —
Resinated, bbls., works ..... lb. 1.47 - —
Lithopone, ord., bgs., c.l., divd. E. lb. .08½- —
bgs., l.c.l., divd. E. ..... lb. .09½- —
Lithopone, titanated (high-strength) bgs., c.l., divd lb. .11 - —
bgs., l.c.l., divd. ..... lb. .12 - —

Lobelia herb bls ..... lb. .55 - —
Lobeline sulfate, bots., 50-oz. lots, works oz 30.00 - —
Locust bean gum powd. bgs .. lb .38 - .40
Lycopodium, cs. ..... lb. 3.25 - 3.50
l-Lysine monohydrochloride, 25-lb. dms lb. 4.95 - —

M

Mace, Siauw, No 1, bls ..... lb 2.20 - —
No. 2, whole, bls ..... lb 1.65 - —
siftings, bls. ..... lb. 1.60 - —
Mace oil, dist., cns., dms ..... lb 9.75 12.25
Magnesia, calcined tech. bgs., cns., frt equald lb. .25¾ .26½
Tech., syn., rubber grade, light, bgs., c.l., frt. equald lb. .28¾ .30
rubber grade, extra light, bgs., c.l., frt equald lb. .28 - —
bgs., l.c.l., frt. equald lb. .28¾ —
Above prices are quoted f.o.b works, freight equald, with Metropolitan New York and competitive producing points
Magnesia, calcined, tech., heavy, 85%, bgs., c.l., f.o.b. Luning, Nev ton 39.50 - —
91%, bgs., c.l. same basis. ton 49.50 - —
95%, bgs., c.l., same basis. ton 59.00 - —
USP, light, bgs. ..... lb. .36½- .37½
USP, heavy, bgs. ..... lb. .36½- .37½

ONE LABEL — *First Grade Only*

ONE PRICE — *That Saves You Money*

. . . and Perfect Performance for *Every* Purpose!

M. C. P.

Pure
Unadulterated
California

LEMON OIL

U. S. P.

An *Exclusively First Grade Lemon Oil* . . . Cold Pressed in California . . . and *Packed by the Producer* to Assure Highest Quality

For nearly 30 years, Mutual Citrus Products Co. has been cold-pressing California lemon oil for distribution by others. Now, M.C.P. LEMON OIL is being *prepared and packed* under the M.C.P. label. There is only *one label* and *one* quality — *the highest* — for M.C.P. LEMON OIL. Yet, M.C.P. LEMON OIL costs you *less* . . . while providing a product that is unsurpassed for flavor, purity, and dependability . . . for *every* purpose.

Produced and Packed by

MUTUAL CITRUS PRODUCTS COMPANY

Since 1928 Growers and Processors of Citrus Products

Distributed by

MUTUAL CITRUS PRODUCTS CO.
424 South Atchison Street, Anaheim, Calif.

R. D. WEBB & CO., INC.
137 Boston Post Road, Cos Cob, Conn.

Magnesite, chemical grade, calcined, powd., bgs c.l., works, frt. equald ton 86.25 - —
Chemical grade, deadburnt, standard grain, bulk, c.l., Chawelah, Wash. ....ton 46.00 - —
Magnesium bromide, cs. jars lb. .95 - 1.00
Magnesium carbonate, tech., bgs., c.l., frt. equald lb. .11 - —
bgs., t.l., frt. equald lb. .11½- —
bgs., l.c.l., frt equald lb. .13½- .14
USP, bgs., c.l., frt. equald lb. .13½- —
bgs., t.l., frt. equald lb. .14 - —
bgs., l.c.l., frt equald lb. .15 - .16
Above prices are quoted f.o.b. works, freight equald, with Metropolitan New York and competitive producing points.
Magnesium chloride, anhyd., 92%, flake or pebble, dms., c.l., works lb. .12¾ - —
dms., l.c.l., works lb. .14 - .15
Hydrous, 99%, flake, bgs., c.l., works ton 55.00 - —
bgs., l.c.l., works ton 65.00 - 80.00
Magnesium gluconate, 100-lb. dm., f.o.b. works E lb. 1.42 - —
Magnesium hydroxide, NF, powd., dms., 500-lbs. or more, f.o.b., works lb. .24½- .25½
Magnesium tauryl sulfate, dms., c.l., frt. alld lb. .22½- —
dms., l.t.l., frt. alld lb. .23½- —
tanks, frt. alld lb. .21½- —
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more, works lb. .36 - —
pigs, 10,000-lb. lots or more, works lb. .35¼- —
sticks, cs. works frt. alld. on carlots lb. .59 - —
Magnesium nitrate, cryst., dms., works lb. .29 - —
Magnesium oxide (see Magnesia, calcined).
Magnesium phosphate tribasic, NF, bbls lb. .75 - —
Magnesium silicate (see Talc).
Magnesium silicofluoride, dms., works lb. .10½- .12
Magnesium sulfate, tech., bgs., c.l., works 100 lbs. 2.15 - —
bgs., l.c.l., works. 100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 2.35 - —
bgs, l.c.l., 5,000 lbs., 1 withdrawal 100 lbs. 3.10 - —
bgs, smaller lots 100 lbs. 3.35 - —
Magnesium trisilicate, USP, fib. dms., 5,000-lb. lots lb. .38 - —
fib. dms., 1,000-lb. lots lb. .40 - —
fib. dms., 100-lb. lots lb. .45 - —
Bulky and super grades of magnesium trisicilate 7c. per. lb. higher.
Malachite green, straight, PTMA, bbls, works lb. 5.30 - —
Malathion, dms., c.l., works lb. .89 - —
dms., l.c.l., works lb. .92 - 1.01
Maleic acid, cryst., powd., dms. lb. .37¼- —
Maleic anhydride, dms., c.l., dlvd. E. of Rockies lb. .28¾- —
dms., l.c.l., dlvd. E. of Rockies lb. .29¾- —
tanks, dlvd. E. of Rockies lb. .27¾- —
Prices on maleic anhydride W. of Rockies, 1½c. per. lb. higher.
Malic acid, tech., dms. lb. .50 - —
Mandelic acid, NF, dms., 1,000-lb. lots lb. 2.35 - —
dms., smaller lots lb. 2.40 - 2.50
Mandrake root, bls lb. .40 - —
Manganese acetate, dms., dlvd lb. .35 - —
Manganese borate, tecn., fib. dms. lb. .23½- —
Manganese carbonate, chemical grade, 46% Mn, bgs., 20,000-lb. lots and more, works lb. .11 - .16
Manganese chloride, CP, anhyd., dms., 20,000-lb. lots, works lb. .21¾- —
smaller lots, works lb. .23½- —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net works ton 148.00 - —
40,000 to 99,999-lb. lots, paper bgs., same basis ton 144.50 - —
40,000 to 99,999-lb. lots, dms. same basis ton 152.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots, $3 per ton higher.
Manganese gluconate, dms. lb. 1.84 - —
Manganese hydrate, dms., dlvd. lb. .35 - —
Manganese hypophosphite, NF, dms. lb. 3.52 - —
Manganese linoleate, liq., 4.35% Mn, dms. lb. .35¾- —
Solid, precip., 8.2% Mn, bbls. lb. .41¼- —
Manganese metal, electrolytic, dms., c.l., dlvd. E. lb. .34 - —
dms., ton lots, dlvd. E. lb. .36 - —
dms., smaller lots, dlvd. E. lb. .38 - —
Manganese naphthenate, liq., 6% Mn, dms., frt. alld. lb. .29¾- —
Manganese resinate, fused, 3½% Mn, dms lb. .25¼- —
Precip., 6½-7% Mn, dms lb. .33 - —
Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd. S. E. ton 97.50 - —
bgs., l.c.l., dlvd. S. E. ton 104.50 - —
Manganese tallate, 6%, dms. lb. .26 - —
Manila copal gum, C, bgs. lb. .35 - .39
DBB, bgs. lb. .25 - .28
DK, bgs. lb. No stocks.
DK, dust bgs. lb. .14 Nom.
MA, soft, bgs. lb. .20 - .24
WS. bgs. lb. No stocks.
Mannitol, com'l, fib. dms., ton lots, works lb. .60 - —
fib. dms. to ton lots, works lb. .62 - —
fib. dms., single dm., works lb. .65 - —
Marine pitch, dms. lb. .04¼- .05
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works lb. .27½- —
bgs., l.c.l., works lb. .29 - —
Menadione, USP, bots. gram. .044 - .05
Menhaden oil, crude, tanks, works, Atl. & Gulf lb. .07¼- —
Menthol, nat., USP, Brazilian, cs. lb. 6.25 - 6.40
Japanese, cs. lb. 7.00 - 7.18
Syn., USP, racemic, cns lb. 4.50 - —
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld lb. .44 - —
bgs. fib. dms. less ton lots, same basis lb. .46 - —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton lots, works, frt. alld lb. .54 - —
bgs. fib. dms. less ton lots, same basis lb. .56 - —
Mercuric chloride, NF, cryst., dms., 50-lb lots or more lb. 4.98 - —
USP, gran. or powd., 50-lb. dm., 100 lbs., f.o.b. works lb. 4.78 - —
Mercuric cyanide, NF VIII, powd., fib dms lb. 6.84 - —
Mercuric iodide red, NF, 100-lb. dm., f.o.b. works lb. 7.72 - —
Mercuric oxide, red., NF IX, 50-lb. dm., 100 lbs., f.o.b. works lb. 5.97 - —
tech., 50-lb. dm., 100 lbs., same basis lb. 5.77 - —
Mercuric oxide, yellow, NF, 50-lb. dm., 100 lbs., same basis. lb. 6.14 - —
tech., bbls., 1,000-lb. lots lb. 5.58 - —
bbls, smaller lots lb 5.60 - —
Mercurous chloride (see Calomel).
Mercurous iodide, yellow, NF, 100-lb. net-flask 224.00 - 227.00
Mercury, ammoniated (see White precipitate, USP XV).
Mercury metal, 76 lbs. per flask, net-flask 216.00 - 218.00
Mesityl oxide, dms., c.l., dlvd. lb. .15 - —
dms., l.c.l., dlvd. lb. .16½- —
tanks, dlvd. lb .12½- —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid, dms., works lb .57 - .75
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m-Phenylenediamine).
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4-tolylenediamine).
Methacrylic acid, glacial, 98%, dms., truckloads, frt. equald lb. .42½- —
dms., smaller lots, frt. equald, lb. .43 - .75
tanks, works, frt. equald lb. .40 - —
Methanol, nat., denaturing grade, tanks, frt. alld gal. .85 - —
Syn., zone 1, dms., c.l. or t.l. min., dlvd gal. .51½- —
dms., l.c.l., dlvd gal. .61½- —
tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area gal. .35 - —
tankwagon, 4,000 gal. min., dlvd gal. .30 - —
tankwagon, 4,000 gal. min., f.o.b. terminal gal. .29 - —
Syn., zone 2, dms., c.l. or t.l., min., frt. alld. or dlvd. gal. .55½- —
dms., l.c.l., works gal. .65½- —
tankwagon, 2,000-4,000 gal. lots, min., dlvd., Metropolitan area gal. .39 - —
tanks, 4,000 gal. min. dlvd. gal. .34 - —

Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah, Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

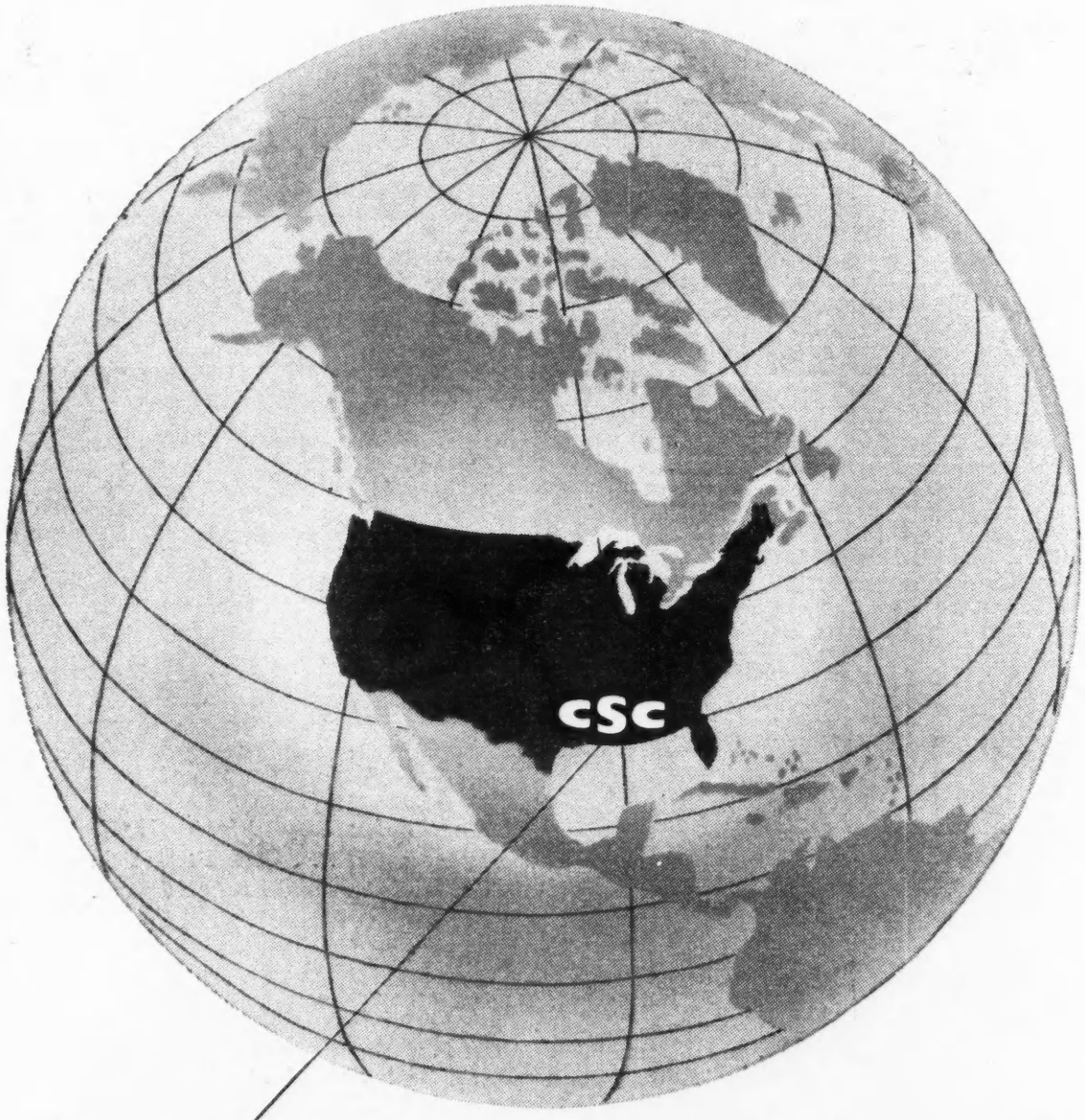
Methapyrilene fumarate, 100-999 lbs., dms., f.o.b. works, frt. equald lb. 21.75 - —
Methapyrilene hydrochloride, 100-999 lbs., dms., f.o.b. works, frt. equald lb. 27.25 - —
Methenamine (see Hexamethylenetetramine).
Methionine hydroxyanalogue, (calcium salt) 90% min., dms., t.l., frt. alld. lb. 1.10 - —
dms., l.t.l., same basis lb. 1.16 - —
dl-Methionine, fib. dms., frt. alld., 50-lb. or more lb. 3.50 - —
Feed grade, 98%, fib. dms., same basis lb. 1.55 - —
Methyoxychlor, 50% wettable powder, dealers, dms., cs. lb. .66 - —
Methyl abietate, non-ret. dms., c.l., dlvd. zone 1 lb. .21½- —
non-ret. dms., l.c.l., same basis lb. .22 - .22½
Methyl abietate, hydrogenated, non-ret. dms., c.l., dlvd. zone 1 lb. .23½- —
non-ret. dms., l.c.l., same basis, lb. .24 - .24½

Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio., Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.

Methyl acetone, nat., dms., l.c.l., E. of Miss., frt. alld. gal. .62½- —
Syn., dms., c.l., frt. alld E. gal. .66 - —
dms., l.c.l., frt. alld. E. gal. .76 - —
tanks, frt. alld. E. gal. .51 - —

Synthetic methyl acetone E. territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.

Methyl acrylate, dms., c.l., t.l., dlvd. lb. .39 - —
dms., l.t.l., dlvd. lb. .40 - —
tanks, dlvd. lb. .37 - —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd. E lb. .17 - —
dms., l.c.l., dlvd. E. lb. .18½- —
tanks, dlvd. E. lb. .14½- —



One of the world's largest producers of

METHANOL

Produced at Commercial Solvents Corporation's Sterlington Plant in Louisiana. Delivered fast wherever you are located. Strategically situated bulk distribution points and service offices coast-to-coast guarantee delivery by tanker, barge, tank car, tank truck and drums—when wanted.

Call on CSC for dependable long-term supply for whatever quantity you need. CSC methanol is marketed at a minimum purity of 99.85% and with unusually strict specification limits—one of the highest purities known for a bulk chemical. You can't get better quality—or service—anywhere!

INDUSTRIAL CHEMICALS DEPARTMENT

COMMERCIAL SOLVENTS CORPORATION

260 MADISON AVENUE, NEW YORK 16, N. Y.

Atlanta • Boston • Chicago • Cincinnati • Cleveland • Detroit • Kansas City
Los Angeles • New Orleans • Newark • New York • St. Louis • San Francisco

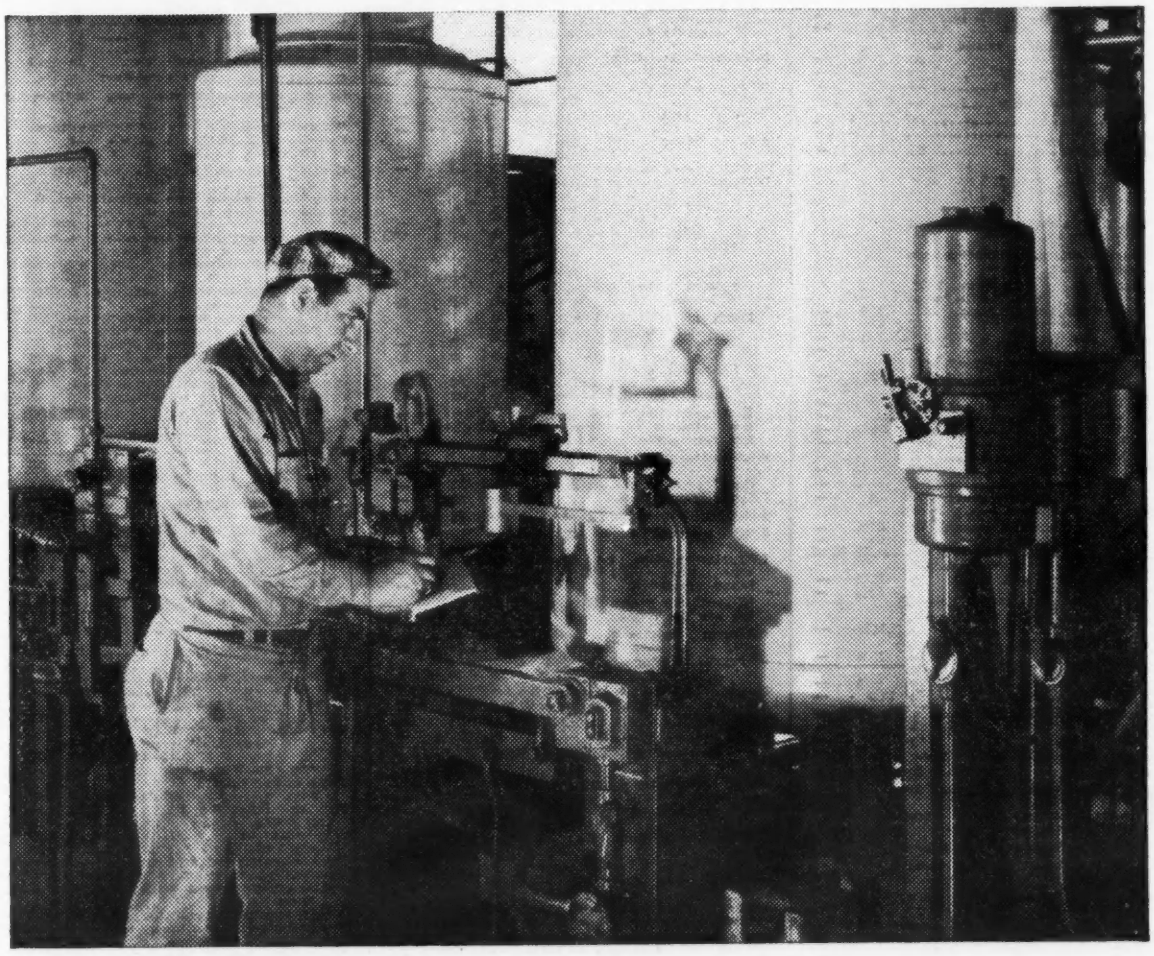
IN CANADA: McArthur Chemical Co. (1958) Ltd., Montreal • IN MEXICO: Comsolmex, S. A. Mexico 7, D. F.

Methylamyl alcohol, dms., c.l., dlvd. lb. .17 - —
dms., t.c.l., dlvd. lb. .18½- —
tanks, dlvd. lb. .14½- —
Methylamyl ketone, dms., works lb. 1.05 - —
N-Methylaniline, tech., tanks, frt. alld. lb. .60 - —
Methylanthranilate, cns. lb. 2.20 - 2.75
Methyl benzoate cns., dms. lb. .60 - .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld. lb. .62 - .65
Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb bgs., c.l., works lb. .82 - —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .89 - —
50-lb. bgs., smaller lots, frt. alld on 100 lbs lb. 1.05 - —
Standard vis. (15,400 cps.), 50-lb. bgs. c.l., frt. alld lb. .69 - —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .76 - —
50-lb. bgs., smaller lots, frt. alld. on 100-lbs lb. .79 - .81
Methyl chloride, indust., cyls., frt. equald lb. .22¼- —
tanks, multi-unit, same basis. lb. .16¼- —
tanks, single unit, same basis. lb. .12¾- —
Methyl chloride, refrigerator mfrs. cyls., dlvd lb. .48¾- —
other consumers or service men, cyls., dlvd lb. .67¾- —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, cns. lb 1.55 1.80
Methyl ethyl ketone, dms., c.l., dlvd lb. .15 - —
dms., t.c.l., dlvd lb. .16½- —
tanks, dlvd. lb. .12½- —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .45 - —
dms., t.c.l., works lb. .45¾- —
tanks, works lb. .43 - —
Methyl formate, refd., dms. lb. .35 - .40
Tech., non-ret. dms., any quantity works lb. .10 - —
tanks, works lb. .07 - —
a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works lb. .21 - —
100-lb multiwall paper bgs., t.l., min. 23,000 lbs., works lb. .21½- —
100-lb multiwall paper bgs., l.t.l., works lb. .23 - —
Methyl heptin carbonate, bots (o. 28.00 - 31.00
Methyl p-hydroxybenzoate, fib. dms. lb 1.90 - 2.00
Methyl ionone, standard, cns. dms. lb. 3.40 - 3.85
Methyl isobutyl carbinol (see Methyl amyl alcohol).
Methyl isobutyl ketone, dms., c.l., dlvd lb. .17 - —
dms., t.c.l., dlvd lb. .18½- —
tanks, dlvd lb. .14½- —
Methyl methacrylate, dms., c.l., t.l., frt equald with Belle, W. Va. lb. .31 - —
dms., smaller lots, same basis lb. .31½- —
tanks, same basis lb. .29 - —
Methyl naphthyl ketone, cryst., cns lb 2.45 4.30
Methyl parahydroxybenzoate (see Methyl p-Hydroxybenzoate)
Methyl parathion, tech. 80% dms., frt. alld E lb. .84 - —
Methyl parathion prices 2c. per lb. higher in West
Methyl roseaniline chloride, NF., 5-lb fib dms. lb 6.90 - —
Methyl salicylate, dms., t.l., frt. alld lb. .60¼- —
dms., t.c.l., same basis lb. .62½ .67½
Methyl testosterone, USP, 100-gram bots gram. No Prices.
Methyl violet toner, molybdated, PMA, bbls., dlvd. E of Rockies lb 2.80 - —
Tungstated, PTMA, bbls., same basis lb. 4.35 - —
Methyl violet prices 1c higher W. of Rockies
Methylene blue, fib. dms., 100-lb. lots, frt. adjusted lb 3.25 - —
Methylene chloride, tech., straight or assorted, dms., c.l., or t.l., dlvd lb. .13½- —
dms., t.c.l., l.t.l. dlvd lb. .15¾- —
Tech., tanks, 4,000-gal. min., dlvd. lb. .12¼- —
tanktrucks, 1,000-gal. min., dlvd. lb. .13¼- —
b-Methylnaphthalene, 32 C., m.p., dms., works lb. .90 - —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-phenyl-3-methylpyrazolone 5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint, plastic, 100 mesh, bgs. c.l., works lb. .04 - —
roofing, 20 to 80 mesh works lb. .03 - —
Mica, wet-grd., biotite, bgs., c.l., works, frt. alld. E lb. .06½- —
bgs. t.c.l. ex whse. lb. .07¼- —
paint or lacq., bgs., c.l., 325 mesh works frt. alld. E. lb. .08¼- —
bgs. t.c.l., ex-whse. or freight alld. E lb. .09 - —
rubber bgs., c.l., works, frt. alld. E. lb. .08 - —
bgs., t.c.l., ex-whse or frt. alld E lb. .08¾- —
wallpaper bgs. c.l. works, frt. alld E lb. .08¾- —
bgs. ex-whse or frt. alld E. lb. .09 - —
white, 5-10 microns, bgs., c.l., works, frt. alld. E. lb. .08¼- —
Mica, wet-grd. W. of Miss. ½c. higher; W. of Rockies 1c. higher.
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 - .11
laminating grades, tankcars, works lb. .11 - .12
Mineral black, bgs., works lb. .0160- .0673
Mineral oil, white, tech., 50-65 vis., non-ret. dms., c.l., f.o.b. refy gal. .62 - —
non-ret. dms., t.c.l., same basis gal. .67 - —
tankcars, refy gal. .46 - —
65-75 vis., non-ret. dms., c.l., same basis gal. .62 - —
tankcars, refy. gal. .46 - —
80-90 vis., non-ret. dms., c.l., same basis gal. .63 - —
non-ret. dms., t.c.l., same basis gal. .68 - —
tankcars, refy gal. .47 - —
135-138 vis., non-ret. dms., c.l., same basis gal. .69 - —
non-ret. dms., t.c.l., same basis gal. .74 - —
tankcars, refy. gal. .53 - —
145-155 vis., non-ret dms., c.l., same basis gal. .75 - —
non-ret. dms., t.c.l., same basis gal. .80 - —
tankcars, refy gal. .59 - —
USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .77 - —
non-ret dms., t.c.l., same basis gal. .82 - —
tankcars, refy. gal. .61 - —

Mineral oil, USP, 200-210 vis., non-ret. dms., c.l., f.o.b. New York gal. .84 - —
non-ret. dms., t.c.l., same basis gal. .89 - —
tankcars, refy. gal. .63 - —
300-350 vis., non-ret. dms., c.l., f.o.b. New York gal. .84½- —
non-ret. dms., t.c.l., same basis gal. .89½- —
tankcars, refy gal. .68½- —
Mineral orange, American, bbls., c.l., works lb. .1660- .1670
bbls., t.c.l., same basis lb. .1760- .1770
Mineral spirits, petroleum, odorless, tanks, refy Watson, Calif. gal. .25 - —
tanks, Borger, Tex. gal. .25 - —
Houston, Tex. gal. .25 - —
Newark gal. .29 - —
New York gal. .30½- —
Philadelphia gal. .32 - —
Wood River, Ill gal. .2725- —
tankwagon, New Jersey, dlvd. gal. .37½- —
tankwagon, New York, dlvd. gal. .38½- —
Mineral spirits, petroleum, regular, tanks, Calif., ex tax San Francisco gal. .169 - —
tanks, east coast, New Jersey, New York gal. .18 - —
tanks, group 3 gal. .12875- —
tanks, Houston, Tex. gal. .145 - —
tankwagon, Boston gal. .20 - —
Buffalo gal. .20½- —
Chicago gal. .289 - —
Cleveland gal. .23½- —
Newark gal. .19 - —
New York gal. .19 - —
Philadelphia gal. .19½- —
Pittsburgh gal. .19 - —
Providence gal. .20½- —

Mirbane oil (see Nitrobenzene)
MNPT maroon toner, kgs., c.l., works lb 6.30 - —
Molasses, blackstrap, feed grade, tanks, New Orleans gal. .09¾- .10
tanks, New York gal. .14½- .16
Molybdated orange, bbls lb. .83 - —
Molybdenum metal, powd., 80 or 200 mesh, ctns., works kilo 7.84 - —
325 mesh, ctns., works kilo 9.13 - —
Molybdenum trioxide, purif., dms., works lb. 1.15 - —
Tech. chemical, dms. works, basis Mo content lb 1.43 - —
Molybdenum trioxide, tech., metallurgical, dms., works, basis Mo. content lb. 1.47 - —
Molybdic acid, 85%, dms., works lb 1.03 - 1.15
Monoallylamine, dms., c.l., dlvd lb. .963 - —
dms., c.l., dlvd. lb. .995 - —
tanks, dlvd. lb. .90 - —
Monobutylamine, dms., c.l., dlvd E. of Rockies lb. .57½- —
dms., t.c.l., same basis lb. .59 - —
tanks, same basis lb. .55 - —
Mono-tert-butyl-m-cresol, dms., c.l., works lb. .55 - —
dms., t.c.l., works lb. .56 - —
tanks, works lb. .54 - —
Monochloracetic acid, purif. (see Chloroacetic acid, mono)
Monochlorobenzene, dms., c.l., frt. alld or dlvd. E lb. .10½- —
dms., t.c.l., same basis lb. .11½- —
tanks, same basis lb. .08¾- —

Monoethanolamine, dms. c.l. dlvd E lb 27½- —
dms., t.c.l., same basis lb. .29 - —
tanks, same basis lb. 25 - —
Monoethylalphanaphthylamine (see N-Ethyl-a-naphthylamine).
Monoethylamine, 70% aqueous, solution, dms., c.l., dlvd E. 100% basis lb 38½ —
dms., t.c.l. dlvd E 100% basis, lb. 40 - —
tanks, dlvd. E., 100% basis lb. .35 - —
Monoethylaniline (see N-Ethylaniline).
Monoethylorthotoluidine (see N-Ethyl-o-toluidine).
Monoisopropanolamine, dms. c.l., dlvd E lb. 27½- —
dms., t.c.l., same basis lb. .29 - —
tanks, same basis lb. 25 - —
Monoisopropylamine, anhyd., dms., c.l., dlvd lb. .33½- —
dms., t.c.l. same basis lb. .35 - —
tanks, same basis lb. .31 - —
Monomethylamine, anhyd., cyls., t.c.l., frt equald., 100% basis lb .30 - —
tanks, 100% basis lb. .26 - —
30-35% soln., dms., c.l., frt. equald., 100% basis lb. .38 - —
dms., t.c.l., frt. equald., 100% basis lb. .36½- —
tanks, frt. equald., 100% basis. lb. .26 - —



NOW...
THERE'S MORE FATTY ACID PER POUND IN THE ALL-NEW PAMAK® 4A

When Pamak 4A, the standard of the industry, was introduced in October of 1957, it was the first of the lower priced tall oil fatty acids with all of the properties needed for use in high-quality alkyd resins.

Now, two years later, Pamak 4A is again improved to set new standards of value for alkyds. Color is lighter. Rosin content is reduced. And undesirable unsaponifiables are held to a new minimum.

The result—there's more fatty acid in each pound; more resin-making ingredient; less waste.

So—why not put this all-new Pamak 4A to work for you today. Write, wire, or phone your PMC Pamak specialist.

Paper Makers Chemical Department
HERCULES POWDER COMPANY
INCORPORATED
Wilmington 99, Delaware

PT59-1

Monomethylamine, 40% soln., dms., frt. equald., 100% basis. lb. .33 - —
dms., t.c.l., frt. equald., 100% basis lb .33½- —
tanks, frt. equald, 100% basis. lb. .26 - —
Monopentaerythritol tech. ngs. c.l., dlvd E lb .31 - —
bgs., t.c.l., dlvd. E lb. .32 - —
Monopotassium glutamate dms., 1,000-lb lots, frt. alld lb 3.05 - —
dms. 100-lb lots, same basis lb 3.25 - —
Monosodium glutamate dms. 100 lbs., dlvd lb. 1.00 - 1.15
Monosodium phosphate (see sodium phosphate, monobasic).
Mono-tert-butyl-m-cresol dms., c.l., works lb. .55 - —
dms., t.c.l., same basis lb .56 - —
tanks, same basis lb .54 - —
Montan wax, Calif., refd., bgs lb. .27 - .28
imp., crude Bohemian, bgs. lb 22 - .24
German, bgs. lb. .26 - .27
Morphine, cns. oz. 12.40 12.60
Morphine acetate, anhyd., cns oz 9.95 10.00
Morphine hydrobromide, cns oz 9.90 9.95
Morphine hydrochloride, NF, cns oz 9.90 9.95
Morphine sulfate, USP, cns. oz 9.90 10.05
Morpholine, dms., c.l., dlvd E lb .55¼ —
dms. t.c.l. dlvd E. lb. .56¼ - —
tanks, dlvd E. lb. .52¼ - —
Muriatic acid (see Hydrochloric acid)
Musk, syn. ambrette, fib dms., 100-lb. lots lb 4.40 4.90
cns., 25-lb lots lb. 4.50 5.00
Ketone, fib. dms., 100-lb lots. lb 4.60 5.10
cns. 25-lb. lots lb 4.70 5.20
Xylol, fib, dms., 100-lb. lots lb. 1.26 - —
cns., 25-lb. lots lb. 1.40 - —
Mustard seed, Danish yellow, bags. lb .11½- —
Montana, yellow, bgs lb. .10½- —
Oriental, bgs. lb .08 - —
Mustard oil, syn bots. lb 1.60 1.85
Myristic acid, bgs lb. .31 - .33
tanks lb. .30½- .32
Myrrh gum, cs. lb. .55 - —

N

Naphtha, high solvency (see Solvent naphtha, petroleum).
Naphtha, petroleum, cleaner's (see Cleaner's naphtha).
Naphtha, VM&P, petroleum, 225°-300°F., b.r., tanks, west coast, Los Angeles gal. .174 —
Portland, Ore. gal. .18 - —
San Francisco gal. .179 - —
Seattle, Wash. gal. .18 - —
east coast, New Jersey and New York gal. .19 - —
group 3 gal. 13875 —
tankwagon, Boston gal. .21½- —
Chicago gal. .269 - —
Cleveland gal. .24½- —
Houston Tex. gal. .15½- —
Newark gal. .20½- —
New York gal. .20½- —
Philadelphia gal. .21½- —
Pittsburgh gal. .20 - —
Naphthalene crude, dom., 74°, tanks, frt equald lb. .04¼- —
78°, tanks, same basis lb. .05 - —
imp., 78°, bgs., large lots lb. .09½ Nom.
Refd., indust., chipped, crushed, bgs., frt. equald lb. .12½- —
tanks, same basis lb. .09¾- —
Refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis lb. .15½- —
cs., 50 lbs., c.l., same basis. lb. .15¾- —
1-lb pkgs., c.l., same basis. lb 1P½- —
a-Naphthol, dms., frt. alld. lb. 1.00 - —
b-Naphthol, tech., flake, bbls., c.l., works lb. .33 - —
bbls. t.c.l., works lb .35 - —
Naphthol, FTR, red toner, bbls., works lb 5.50 - —
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid)
1-Naphthol-4 sulfonic acid (see Nevile and Winther's acid).
1-Naphthol-5-sulfonic acid (see L acid).
1-Naphthol-5-sulfonic 8-amino acid (see S acid).
2-Naphthol-6,8-disulfonic acid (see Gamma acid)
Naphthol sulfonic mixed acid (see Cleve's acid).
a-Naphthylamine, dms., frt. alld lb. .50 - —
b-Naphthylamine tech. flake, bbls., works lb 1.60 - —
1-Naphthylamine-5-sulfonic acid (see Laurent's acid).
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).
2-Naphthylamine-1-sulfonic acid (see Tobias acid)
2-Naphthylamine-6-sulfonic acid (see Broenner's acid).
2-Naphthylamine-7-sulfonic acid (see F acid)
Naringin, fib dms lb 8.50 - -
Neatsfoot oil, 15° cold test, dms lb. .30 Nom.
20° cold test, dms lb. .29 Nom.
30° cold test, dms lb. .28 Nom.
Neocinchophen, USP dms., frt. adjusted lb 7.00 8.00
Neomycin sulfate, fib. dms., 1-kilo basis activity gram. .25 - —
fib. dms., 100-999-gram lots, basis activity gram. .30 - —
Tech., fib. dms. gram. .13½- .14
Neroli oil, NF, French, bots. lb. 425.00 - 575.00
Tunisian, bots. lb 400.00 —
Nerolin, cns. lb. 2.45 - 2.85
Neville and Winther's acid dms., frt. alld lb 1.30 - —
Niacinamide (see Nicotinamide).
Nickel acetate bbls. dlvd lb. .68½- .75½
Nickel carbonate, bbls. dlvd lb. 78¼- .85¼
Nickel chloride bbls. dlvd lb. .37 - .45
Nickel formate, bbls., ton lots, frt. alld lb. 72 - .73
Nickel metal, electro cathodes, cs., works lb. 74 —
Nickel nitrate, dms., frt. alld lb. .31½- .33½
Nickel oxide black, bbls lb. .85 - —
Green, bbls. lb. .84 - —
Nickel sulfate bgs. c.l. dlvd lb. .28 - —
bgs., t.c.l., dlvd lb. .28½- .36
Nicotinamide, USP 50-kilo dm. frt. adjusted kilo 8.00 - —
Nicotinamide hydrochloride, dms. frt adjusted kilo 8.00 - —
Nicotine sulfate 40% dealers, 50-lb dms. frt alld lb 1.20 - —
40% manufacturers 500-lb dms. frt. alld lb 1.05 - —
Nicotinic acid, USP dms dlvd kilo 6.00 - —
Nicotinic amide, USP (see Nicotinamide)
Niger seed, bgs lb 10¼- —
Nikethamide cbys lb 5.00 - —
Nitric acid, 36° Be., cbys., c.l., works E 100 lbs 5.75 —
cbys., t.c.l., works E 100 lbs 6.05 6.85
38° Be., cbys., c.l., works E. 100 lbs 6.25 - —
cbys., t.c.l., works E 100 lbs 6.55 7.35
40° Be., cbys., c.l. works, E 100 lbs 6.75 - —
cbys., t.c.l., works, E 100 lbs 7.05 7.85
42° Be., cbys., c.l., works, E. 100 lbs. 7.25 - —
cbys. t.c.l. works E 100 lbs 7.55 8.35
58.5 to 68%, HNO_3, tanks, works, 100% basis 100 lbs 3.90 - —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs 4.90 - —
CP, NF, consumer, cbys., extra, c.l., works lb. .18½- —
cbys. extra t.c.l. works lb. 20 - —
5-pint bots. extra cs., c.l., same basis lb. .22½- —
5-pint bots. extra cs., t.c.l., same basis lb .24 .25
4-Nitro-2-aminophenol tech. paste, dms., frt. alld lb. .99 - —
m-Nitroaniline, cryst., dms., frt. alld lb 1.15 - —
Paste dms. frt. alld. 100% basis lb 1.10 - —
o-Nitroaniline, flaked dms. t.l., frt. alld lb 49 - —
dms., t.t.l. frt. alld lb. .51 - —
o-Nitroaniline orange toner, kegs, lb 1.35 - —
p-Nitroaniline, dms. frt alld lb. .445 - —
o-Nitroanisole, tech., tanks frt alld. lb. .36 - —
p-Nitroanisole, tech. solid, dms., frt alld lb. .72 - —
Nitrobenzene, dbl dist., dms., c.l., frt alld lb .13 - —
dms., t.c.l. frt. alld lb .14 - —
tanks, frt. alld lb 11 - —
p-Nitrobenzoic acid dms., c.l., works lb 63 - —
dms. t.c.l., works lb 64 - —
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½ ¾, 5 6, 15-20, 30-40 60-80, 125-175 seconds, bbls. c.l. works lb 37½ —
bbls., t.c.l., same basis lb .33½ 40½
18-20, cps., bbls. c.l., same basis lb. .39½ —
bbls., t.c.l. same basis lb 40½ 42½
250-400, 600-1,000 seconds, bbls., t.c.l., same basis lb. .43 46
Spirit soluble, 30-25 cps., ¼, ½ seconds, bbls, c.l., same basis lb. .43 - —
bbls. t.c.l. same basis lb 44 46
5-6 cps., 40-60 seconds bbls., c.l., same basis lb. .42 - —
bbls. t.c.l. same basis lb 43 45
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.
o-Nitrochlorobenzene dms. c.l. frt. alld lb .15 - —
dms., t.c.l., same basis lb .16 - —
tanks, same basis lb 13 - —
p-Nitrochlorobenzene dms. lb. 26 .27
2-Nitro-p-cresol tech. dms., dlvd. lb 88 - —
Nitroethane, dms., c.l., dlvd E lb .25 - —
dms., t.c.l., dlvd E lb 26½- —
tanks, dlvd E lb. 22½- —
Nitroethane prices West of Rockies are 1c. higher.
Nitrogen solutions, tanks, frt. equald., N unit. 1.24 - —
Nitrogenous process tankage, bulk, works unit-ton 4.50 Nom.
Nitrogenous sewage sludge bulk f.o.b Chicago, works unit ton 3.10 .50
Nitromethane, dms. t.l. dlvd E lb .25 - —
dms., t.t.l., dlvd E lb. 26½- —
Nitromethane prices West of Rockies are 1c. higher
a-Nitronaphthalene, bbls. frt. alld. lb. .31 - —
o-Nitrophenol, dms., works, frt. equald lb. .94 - —
p-Nitrophenol, dms., c.l., frt. alld. lb. .45 - —
dms., t.c.l., frt. alld lb. .47 - —
1-Nitropropane dms., c.l., frt. alld, E of Rockies lb. 23½- —
dms., t.c.l., same basis lb. .25 - —
tanks, same basis lb. .21 - —
2-Nitropropane dms. c.l., frt. alld, E of Rockies lb. .18½- —
dms., t.c.l., same basis lb. .20 - —
tanks, same basis lb. .16 - —
Nitropropane prices West of Rockies are 1c. per lb higher.
m-Nitrotoluene, tech., dms. frt alld lb. .45 - —
o-Nitrotoluene, dms. c.l., frt. alld. lb. .15 - —
dms., t.c.l., frt. alld. lb. .16 - —
tanks, frt. alld. lb. .13 - —
p-Nitrotoluene, tech., cast, dms., c.l., works lb. .27½- —
dms., t.c.l., works lb. .28 - —
flake, dms., c.l., t.l., works lb. .27½- —
dms., t.c.l., works lz. .28 - —
m-Nitro-p-toluidine, dms. lb 1.25 - —
Nonylphenol, dms. c.l., frt. alld. lb. .22 - —
dms., t.c.l. frt. alld lb. .23 - —
tanks, frt. alld lb. .19½- —
Nonylphenol prices on shipments to Western States are 2c. higher.
Nutmegs, East Indian, whole bgs. lb. 1.36 - —
West Indian, bgs lb. 1.45 - —
Nutmeg oil, USP, dist., East Indian, cns lb. 9.50 -12.75
West Indian, cns lb. 9.50 -12.75
Nux vomica, bls lb. .20 - —
Powd., bbls., bxs lb. .20 - .22

O

Ocher (see Iron oxide yellow, nat.).
Ocotea cymbarum oil, dms lb. .43 - .55
Octane, indust., tanks, Bayonne, N.J gal. .20 - —
Borger Tex. gal. .15¾- —
1-Octanol, tech., dms., c.l., dlvd., Zone 1 lb. .43½- —
dms., t.c.l., dlvd. Zone 1 lb. .45½- —
tanks, dlvd., Zone 1 lb. .41 - —
Octyl alcohol, perfumers grade, bots lb 1.60 - 3.25
Octyl alcohol, tech, (see 1-Octanol, tech)
Octyl phenol, bgs., c.l., works lb. .22 - —
bgs., t.c.l., works lb. .22½- —
tanks, works lb. .21 - —
Octyl phenol in dms. 1lc. higher.

OILS

Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liq. dms. lb. .22 - .22½
tanks lb. .20½- —
Oleic acid, dbl.-dist. (white), dms. lb. .18 - .20½
tanks lb. .15½- —
S. d., dms. lb. .16¾- .19½
tanks lb. .14¼ —
Oleo oil, extra, dms lb. .14 Nom.
Oleostearine, dms. lb. .12½ Nom.
Oleum (see Sulfuric acid fuming)
Olibanum gum siftings cs. lb. .13 .20
Tears cs lb 22 .30
Olibanum oil, bots. lb 5.00 7.85
Extra fine bots lb 8.00 9.50
Olive oil edible dms. spot, duty-paid gal. 2.30 - 2.40
Olivine crude works ton 12.00 —
20 mesh, works ton 15.00 - —
100 mesh works ton 20.00 —
Opium USP cns oz. 19.20 -19.45
gran., cns. oz. 21.65 -21.90
powd. cns oz 21.65 -21.90
Orange oil expressed USP Brazilian cns. dms lb No stocks.
California cns. dms lb .85 .90
Florida, cns. dms. lb 70 1.25
Messina cns lb 3.25 5.00
West Indian bitter cns dms lb 2.50 3.25
Sweet, dist., cns. dms lb. .60 - —
Orange peel, bitter, Haitian, bls lb. .14 - .15
Sweet lb. .28 - .30

ORANGE PIGMENTS

Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Origanum oil, Spanish cns lb 1.80 2.30
Orris root, Florentine, bls. lb 55 - —
powd. bbls. bxs. lb .65 - —
Verona bls. lb 35 - —
powd. bbls. bxs lb 45 - —
Orthoanisidine (see o-Anisidine)
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde)
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid (see o-Chlorobenzoic acid)
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline)
Orthochlorophenol (see o-Chlorophenol)
Orthocresol (see o-Cresol)
Orthocresotinic acid (see 2,3-Creosotic acid)
Orthodichlorobenzene (see o-Dichlorobenzene)
Orthonitroaniline (see o-Nitroaniline)
Orthonitrochlorobenzene (see o-Nitrochlorobenzene)
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol)
Orthonitrophenol (see o-Nitrophenol)
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine)
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary amylphenol (see o-tert-Amylphenol)
Orthotolidine (see o-Tolidine base)
Orthotoluidine (see o-Toluidine)
Ouabain USP bots. gram 3.00 4.00
Ouricury wax, crude, bgs. lb. .68 - .70
Refd., pure, bgs. lb. .76 - .78
Oxalic acid, bgs. dms. c.l., works. lb. .18 - .18½
bgs., dms., 10,000-lb lots, works. lb. .18¼- .18¾
bgs., dms., smaller lots, works. lb. 19¼- .19¾
b-Oxynaphthoic acid, fib dms., 250 lbs or more, frt alld. lb 1.14 1.17
Oxyquinolin sulfate, cns. 100 lb lots, works, lb 4.75 5.00
cns., smaller lots, works lb 4.92 5.17

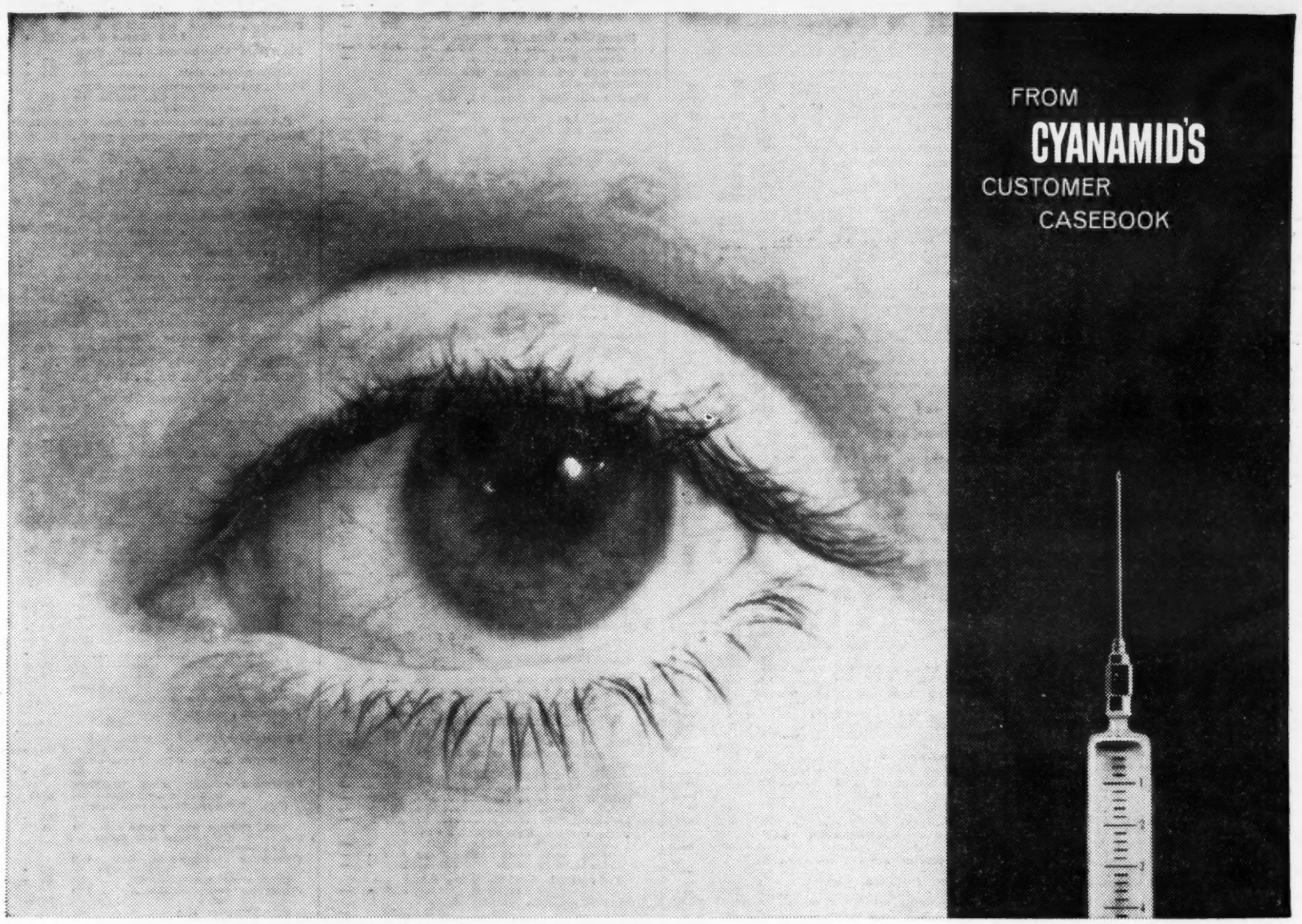
P

Palm oil, clarif., dms lb. .1425- .1525
tanks lb. .1170- —
Palm oil acid, dist., dms. lb. .15¾ .19¼
tanks lb 13¾ .14¼
Palmarosa oil, cns. lb. 3.45 3.75
Papain, NF, powd lb. 5.50 -10.00
Papaverine hydrochloride, nat. or syn., USP cns. 25-oz. to 100-oz lots oz. 5.00 - —
cns., smaller lots oz 5.05 - 5.20
Papaverine sulfate, nat. or syn., USP, cns., oz. 7.10 - 7.35
Paprika, Bulgarian bgs lb. .34 - .35
Hungarian, bgs. lb. .32 - —
Spanish, bgs. lb. .50 - —
Yugoslavian, bgs. lb. .34 - —
Para-aminobenzoic acid (see p-Aminobenzoic acid)
Parachlorobenzoic acid (see p-Chlorobenzoic acid)
Paramethylphenylcinchonic acid (see Neocinchophen).
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2-nitroaniline).
Para-anisidin (see p-Ansidine).
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol)
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner, red, bbls. lb 1.21 - —
Chlorinated, kgs. lb. 1.35 - —
Paraffin, crude, scale, white, 123°-127°F. ASTM, tanks, refy, lb. .0655- —
Paraffin, fully refd., 122°-124°F, ASTM,, tanks, refy lb. .0765- —
125°-127°F. ASTM, tanks, refy. lb. .0765- —
130°-132°F. ASTM, tanks, refy. lb. .0765- —
132°-134°F., ASTM, tanks, refy. lb. .0765- —
135°-137°F., ASTM, tanks, refy. lb. .0765- —
AMP temperatures are an arbitrary 3°F. higher than ASTM
Paraffin oil, pale, 100-110 vis., at 100°F., tanks, east coast refy gal. .14 - —
Paraffin wax (see Paraffin).
Paraformaldehyde, 91%, flake, bgs., c.l., frt. alld lb. .10 - —
bgs., t.c.l., frt. alld lb. .12 - .13
91%, powd., bgs., c.l., ex whse. lb. .1715- —
bgs., t.c.l., ex whse lb. .1865- —
USP-X, fib. dms., c.l. lb. .19 - —
fib. dms., 1,000-lb. lots lb. .20 - —
fib. dms., smaller lots lb. .21½- —
Paraldehyde, tech., 98%, 55-gal. dms., t.l., dlvd lb. .14 - —
55-gal. dms., t.c.l., dlvd lb. .15 - —
tanks, dlvd lb. .11½- —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene).
Paranitrotoluene (see p-Nitrotoluene.
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine)
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol)
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion, ethyl, dms. frt. alld. lb. .84 - —
Parathion prices 2c. per lb. higher in West.
Paratoluenesulfonamide (see p-Toluenesulfonamide).
Paris green, dealers, 100 lb. dms., frt. alld lb. .45 - —
Passion flower herb, bls. lb. .40 - .45
Patchouli oil, imp., cns lb. 4.80 - 5.25
Peach kernel oil, USP (see Apricot kernel oil).
Peacock blue, fugitive, 100% color strength, 250-lb., bbls., dlvd E. of Rockies lb. 1.00 - —
Peacock blue price 1c higher W of Rockies.
Peanut meal, 45% old process, bgs., mills ton. 69.50 Nom.
Peanut oil crude, tanks, f.o.b mills lb. .14½- —
Refd., dms. lb. .14½- .20
tanks lb. .17¾- —
Pectin dom. NF citrus powd. bbls lb 2.05 2.06
tech. powd. 150 jelly grade lb 1.28 - —
Imp Danish ex whse lb 1.28 - —
Penicillin potassium crude, bulk 1,000,000 units. .023 .025
Penicillin procaine 1,000,000 units. .023 025
Pennyroyal oil USP unrectified cns lb. 2.25 - 3.10
Pentachlorophenol, bgs. c.l., t.l., works, frt equald lb .21 —
bgs., t.c.l., same basis lb 22½- .29
Pentachlorophenol in dms 1c higher
Pentaerythritol, tech., bgs., c.l., dlvd lb .31 - —
bgs., t.c.l., dlvd lb. .32 - —
Pentaerythritol, di-and tri-isomers (see Dipentaerythritol and Tripentaerythritol)
Pentane, indust. tanks, Tex. refy. gal. .14 - —
Pentobarbital, dms. 100 lbs or more lb 5.00 - —
Pepper, black, Malabar, bgs lb. .24¾- —
Lampong, bgs. lb. .24½- —
Red, Funtuas, bgs lb .30 - —
Japanese, Hontaka, bgs lb .30 - —
Santaka, bgs. lb .30 - —
Sudanese, bgs lb .36 - —
White, Muntok, bgs lb .45 - —
Peppermint leaves, dom. USP bls., dms lb. .70 - .75
imp., USP., bls lb .85 - —
Peppermint oil, nat., dms lb. 3.15 - 4.00
Redist., USP, dms. lb. 3.60 - 3.90
Perchloroethylene, dms. c.l. or t.l., dlvd lb. .13½- —
dms., t.c.l., dlvd lb. .15¼- —
tanks, dlvd. lb. .11¾- —
tanktruck, 1,000 gal min dlvd. lb. .12¼- —
Peri acid, dry, bbls. frt. alld lb 1.60 - —
Paste, bbls frt. alld lb 1.55 - —
Peru balsam, dms lb. 1.25 - 1.80
Persic oil USP (see Apricot kernel oil).
Petitgrain oil South American cns. dms lb. 2.45 3.20
Petrolatum, cream dms. c.l., refy lb. .08125- —
dms., t.c.l., dlvd. lb. .10125-.11375
tanks refy lb .05875- —
Extra amber, dms., c.l., refy. lb. .07125- —
dms., t.c.l., dlvd. lb 09125-.10375
tanks, refy lb. .04875- —
Lily white, dms., c.l., refy lb. .08625 —
dms. t.c.l. dlvd. lb .10625- .12
tanks, refy lb. .06735- —
USP, snow white dms. c.l., refy. lb. .09125- —
dms. t.c.l. dlvd. lb .11125- .125
tanks, refy lb. .06875- —
USP, soft yellow, dms., c.l., refy. lb. .07125- —
dms., t.c.l., dlvd. lb. .095 - .10375
tanks, refy lb. .04875- —
Petroleum pitch (see Asphalt, petroleum)

PETROLEUM PRODUCTS

Petroleum product quotations are listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret dms., c.l., works lb. .16½- .18¾
non-ret dms., t.c.l., works lb. .17½- .19
tanks, works lb. .14½- .17
50-55%, sulfuric content, non-ret. dms., c.l., works lb. .16 - —
non-ret. dms., t.c.l., works lb. .17 - —
tanks, works lb. .13 - —
o-Phenetidine, dms. c.l., frt alld. E lb. .91 - —
dms., t.c.l., same basis lb. .93 - —
p-Phenetidine, dms., c.l., frt. alld. lb. 1.05 - —
dms., same basis lb 1.08 - —
Phenobarbitol, USP, dms., 100-lb. lots lb 3.25 - —
Phenobarbital-Sodium (see sodium phenobarbital)
Phenol, 90-92% (cresol 8-10%) non-ret dms., frt. alld. E of Rockies lb. .16¾- —
non-ret. dms. t.c.l. same basis. lb. .17¾- —
tanks, same basis lb. .14¾- —
82-84% (cresol 16-18%) non-ret, dms., c.l., same basis lb. .16½- —
non ret. dms., t.c.l., same basis. lb. .17½- —
tanks, same basis lb. .14½- —
Phenol, 30°C. or above, tar distilled, non-ret. dms., c.l., same basis. lb. .18 - —
non-ret dms. t.c.l., same basis. lb. .19 - —
tanks, same basis lb. .16 - —
USP, syn., dms., c.l., t.l., frt. alld lb. .18½- —
dms., same basis lb. .20½- —
tanks, same basis lb. .16½- —
Phenolphthalein, USP or yellow, 250-lb. dm., 2,000 lbs., frt. alld. lb. 1.30 - —
250-lb. dm., same basis lb. 1.35 - —
Phenothiazine drench fib dms., t.l., dlvd lb. .44 - —
fib. dms., t.t.l., same basis lb. .47 - —
Phenothiazine drench, NF, fib. dms., t.l., same basis lb. .43 - —
fib dms. t.t.l. same basis lb. .46 - —
Phenyl acetate, dms., 100-lb. lots, works lb .50 - —
Phenyl salicylate (see Salol).
Phenylacetaldehyde, soln., 50%, bots lb. 2.35 - —
100%, bots lb. 4.00 - 4.65
Phenylacetic acid, pure, cryst., cns. lb 1.25 - 1.75
dl-Phenylalanine, dms. works lb. 27.00 -37.50
1-Phenyl-3-carbethoxy pyrazolone-5, fib. dms 200-lb. lots dlvd E. lb 3.45 - —
fib. dms., smaller lots, dlvd. E lb 3.80 - —



PROBLEM

FIND A WHITER, FINER NEOMYCIN FOR INJECTABLES AND OPHTHALMIC SOLUTIONS

ANSWER

Super White, from American Cyanamid. The whitest, most pharmaceutically elegant neomycin sulfate ever developed. It has an APHA color of 20, far below the normal range. Its potency and other properties meet all U. S. P. standards. Super White . . . the perfect neomycin grade for injectables and ophthalmic solutions. Another example of how Cyanamid reduces your production costs by offering specific neomycin grades for specific applications.

LET CYANAMID SKILL AND EXPERIENCE GUIDE YOU IN THE PRODUCTION OF ANTIBIOTICS...SULFONAMIDES...VITAMIN SUPPLEMENTS

CYANAMID

AMERICAN CYANAMID COMPANY, FINE CHEMICALS DEPARTMENT,
30 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.

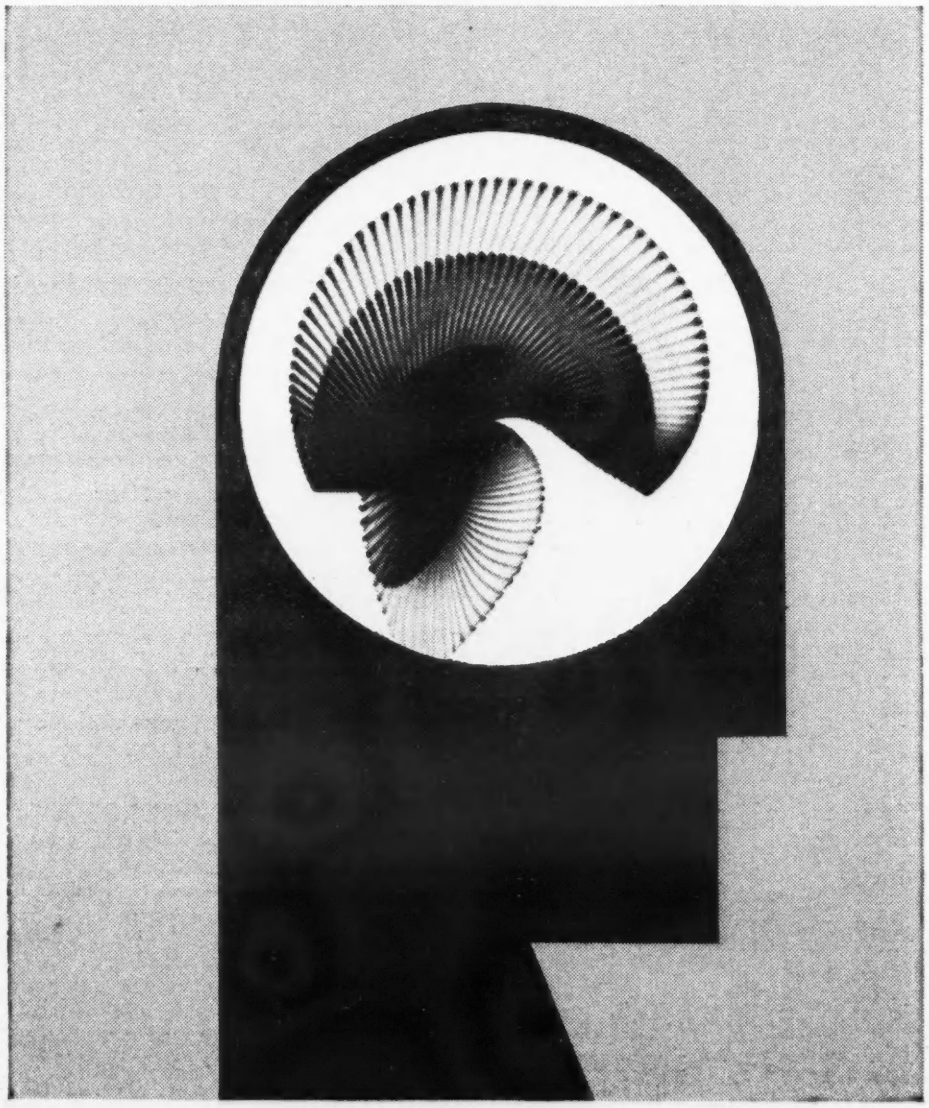
N-Phenyldiethanolamine—Potassium Ferrocyanide

N-Phenyldiethanolamine dms., c.l., dlvd E	lb.	.41	—
dms., l.c.l., dlvd E	lb.	.42½	—
tanks, dlvd E	lb.	.38½	—
m-Phenylenediamine dms. frt alld.	lb	1.10	—
o-Phenylenediamine comt., 100 to 1,000 lbs fib dms., works	lb	1.70	1.80
p-Phenylenediamine refd., dms., works	lb	1.42	—
Tech. dms. works	lb	1.40	—
Phenylethanolamine, dms., c.l., works	lb.	75½	—
dms. l.c.l. same basis	lb.	.77	—
Phenylethyl acetate bots.	lb.	1.25	1.40
2-Phenylethyl alcohol, extra, dms.	lb	1.14	1.50
Standard dms.	lb	1.10	1.60
b-Phenylethylamine, dms., 20,000 lbs. or more frt alld	lb	1.50	—
dms. smaller lots frt. alld	lb	1.70	1.85
Phenylethylphenyl acetate bots	lb	4.00	4.25
Phenylglycuonic acid (see Mendelic acid)			
Phenylhydrazine 97% 450-lb dms.	lb	1.45	—
1-Phenyl-3 methyl pyrazolone-5, fib. dms. 250-lb lots, dlvd E	lb	1.80	—
fib dms. smaller lots, dlvd E	lb	2.10	—
o-Phenylphenol dms. l.c.l. works	lb	48	50
p-Phenylphenol, bgs. c.l., works	lb	38½	—
bgs., l.c.l., works	lb.	43	—
Philippine copal gum, pale, chips, bgs	lb.	23¾	.26
nubs, bgs.	lb.	33¼	.37
seeds bgs.	lb.	20	Nom.
sorts, bgs.	lb.	22¾	.25
Phloroglucinol, comi., fib dms., works	lb	6.40	—
CP. bots., works	lb.	17.75	—
Tech. fib dms., works	lb.	10.45	—
Phloxin red toner (see Eosin red toner)			
Phosgene, ret cvls. works	lb	15½	—
Phosphate defluorinated (see under D).			
Phosphate rock, Curacao, Atlantic ports New Orleans	ton	48.00	—
Phosphate rock, Florida, land pebble, run-of-mine, washed, dried, unground, 66-68%, b.p.l., bulk, c.l., mines, long-ton		5.16	—
55-70%, b.p.l., bulk, c.l., same basis long-ton		5.56	—
70-72%, b.p.l., bulk, c.l., same basis long-ton		6.21	—
74-75%, b.p.l., bulk, c.l., same basis long-ton		7.21	—
76-77% b.p.l., c.l., bulk, same basis long-ton		8.21	—
Above Florida prices are based on fuel oil at $2.37 per bbl and labor at $1.52.			
Phosphoric acid, food grade, 75%, cbys., c.l., works, E., frt. equald	100 lbs.	7.00	—
cbys., l.c.l., same basis.	100 lbs	7.25	7.75
tanks, t.w., works	100 lbs.	5.60	—
80%, cbys., c.l., frt. equald	100 lbs	7.85	—
cbys., l.c.l., works	100 lbs.	8.10	9.35
tanks, t.w., works	100 lbs.	6.00	—
NF, 85%, cbys., c.l., works	100 lbs.	8.50	—
cbys., l.c.l., works	100 lbs.	8.75	9.00
tanks, t.w., works	100 lbs.	6.65	—
Phosphorus, amorph., red, dms., t.l., works	lb.	.55	—
dms., smaller lots, works	lb.	.56	.57
white (yellow), solid, dms., c.l., works, frt. equald	lb.	.20	.20½
dms., l.c.l., works, frt. equald	lb.	.21½	—
tanks, works, frt. equald	lb.	.19	—
Phosphorus oxychloride, dms., c.l., works	lb.	.14	—
dms., l.c.l., works	lb.	.15	—
tanks, works	lb.	.12½	—
Phosphorus pentasulfide, powd., dms., c.l. works	lb.	.13½	—
dms., l.c.l., works	lb.	.14½	.15½
Solid, dms., c.l., works	lb.	.11½	—
dms., l.c.l., works	lb.	.12½	.13½
Phosphorus pentoxide, dms., c.l., works	lb.	.1375	.1475
dms., l.c.l., works	lb.	.1475	.1675
Phosphorus sesquisulfide dms., cs., c.l., works	lb.	.38	—
dms., l.c.l., works	lb.	.39	.40
Phosphorus trichloride, dms., c.l., works	lb.	.14	—
dms., l.c.l., works	lb.	.15	—
tanks, works	lb.	.12½	—
Phthalic anhydride bgs. c.l., works, frt. equald	lb.	.17	.19
bgs., l.c.l., same basis	lb.	.18	.20
tanks, same basis	lb.	.16½	.18½
Phthalimide, 97-98%, dms., frt. alld	lb.	.65	—
Phthalocyanine blue, full strength, bbls dlvd. E of Rockies	lb	2.90	—
Resinated, bbls., same basis	lb	2.75	—
Water dispersable, bbls., same basis	lb	1.52	—
Phthalocyanine blue prices 1c. higher W of Rockies.			
Phthalocyanine green toner, bbls., works	lb	3.35	—
Resinated, bbls	lb	3.00	—
Water dispersable, bbls	lb	1.71	—
Phthalocyanine green prices 1c. higher W of Rockies			
Phthalylsulfacetamide, fib. dms., 1,000-lb. lots or more	lb	5.00	—
NF, fib. dms	lb	5.20	—
a-Picoline, dms., c.l., works, frt. equald	lb.	.43	.43½
dms., l.c.l., works, frt. equald	lb.	.44	—
tanks, same basis	lb.	.415	.422
b-Picoline, 98% dms., t.l., works.	lb	1.05	—
dms., l.c.l., same basis	lb.	1.15	—
tanks, same basis	lb.	.95	—
b,g-Picoline, 50°C. dms. c.l., works.	lb.	.32½	—
dms., l.c.l., works	lb.	.33	—
g-Picoline, dms., f.o.b., works	lb	1.60	—
tanks, t.l. same basis	lb	1.50	—
Picric acid, NF, bbls.	lb.	.85	—
Tech, bbls.	lb.	.44	—
Pigment green B, kgs.	lb	1.45	—
Pilocarpine hydrochloride, USP, bots	oz.	5.25	—
Pilocarpine nitrate USP bots. vials.	oz.	5.15	—
Pimento, Jamaican, bgs	lb.	.68	—
Mexican, bgs	lb.	.57	—
Pimento berry oil, NF dms.	lb	3.75	9.25
Pimento leaf oil, crude, cns.	lb.	2.10	2.48
Pine oil, dest.-dist., dms., l.c.l. works	lb.	.19	—
dms., l.c.l. ex whse. New York.	lb.	.173	—
Steam-dist., dms., ex whse., New York	lb.	.185	—
dms., dlvd.	lb.	.188	—
Pineneedle oil, Siberian (see Abies Siberica oil)			
Pinetar oil, comi. dms., c.l., works.	lb.	.0561	—
dms., l.c.l., works	lb.	.0634	—
dms., c.l., ex whse New York.	lb.	.0745	—
tanks works	lb.	.046	—
NF, rectified, dms., incl., l.c.l., works, South	lb.	.40	—
dms., l.c.l., ex whse, New York	lb.	.41½	—
Refd., dms., incl., l.c.l., works	lb.	.35	—
dms., incl. l.c.l., ex whse New York	lb.	.36½	—
Pink root, bls.	lb.	1.75	—
Piperazine, anhyd., dms. t.l., frt. alld	lb.	1.80	—
dms, l.c.l., same basis	lb.	1.85	—
Piperazine citrate, 36% dms., 1,000 lbs. or more frt. alld	lb.	1.15	—
Piperazine dihydrochloride, 51%, dms. 1,000 lbs. or more, frt. alld	lb.	1.23	—
Piperazine hexahydrate 44%, dms., 1,000 lbs. or more, frt. alld	lb.	.86	—
dms., 200-900 lbs., frt. alld	lb.	.89	—
Piperazine phosphate, 42% dms., 1,000 lbs. or more frt. alld.	lb.	1.06	—
Piperidine, dist., 98% min., dms., frt. equald	lb.	2.60	—
Piperonyl butoxide dms. dlvd E.	lb	4.50	5.05

PITCHES

Pitch quotations are listed individually. For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Plaster of Paris (see Gypsum).			
Platinum metal, works	oz.	76.00	80.00
Pleurisy root, bls	lb	.45	.50
Podophyllum resin, NF, dms.	lb.	15.60	—
Poke root, bls	lb	.19	.22
Polymyxin, bulk, bots., 50 billion units or more 1,000,000 units.		.52	—
bulk, bots., 25-50 billion units. 1,000,000 units.		.54	—
bulk, bots., 1-25 billion units. 1,000,000 units.		.56	—
Polyoxyethylene sorbitan monostearate, dms. 20,000-lb. lots, works	lb.	.42	—
dms., 10,000-20,000-lb. lots, works.	lb.	.44	—
dms., smaller lots, works	lb.	.47	.49
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb. lots, works.	lb.	.42	—
dms., 10,000-20,000-lb. lots, works	lb.	.44	—
dms., smaller lots, works	lb.	.47	.49
Pontianak copal gum, chips, bgs	lb.	.26	—
Nubs, bgs	lb.	.37	.40
Poppy seed, Argentine, bgs.	lb.	No stocks.	
Dutch, bgs.	lb.	.22	—
Danish, bgs.	lb.	.20½	—
Polish, bgs.	lb.	.20	—
Turkish, bgs.	lb.	.17½	—
Potash, caustic, liq., 45% basis, dms., c.l., works 100 lbs.		4.25	—
dms., l.c.l., same basis 100 lbs		5.05	—
tanks, same basis 100 lbs.		3.70	—
reg., flake, 88-92%, dms., c.l., same basis 100 lbs.		9.15	—
dms., l.c.l., same basis 100 lbs.		10.20	—
Potash, solid, 88-92%, dms., c.l., works 100 lbs.		8.70	—
dms., l.c.l. works 100 lbs		9.75	—
Potassium acetate, NF, 200-lb. dm., f.o.b. works E	lb.	.31	—
Potassium bicarbonate, USP, gran. dms	lb.	.22	—
USP, powd., dms.	lb.	.24	—
Potassium bichromate, gran., bgs., c.l., t.l., works	lb.	.18	—
bgs., l.c.l., works	lb.	.18½	.19¼
Potassium bichromate in dms., ¾c. higher.			
Potassium bitartrate, gran., powd., 100-lb. bgs., c.l., frt. equald	lb.	.37	—
100-lb. bgs., 5,000 lbs., 1 shipt., same basis	lb.	.38	—
100-lb. bgs., smaller lots, same basis	lb.	.40	—
Potassium borohydride, powd., dms., works	lb.	16.00	22.00
Pelletized postassium borohydride $1.25 per lb. higher in 1,000-lb. lots.			
Potassium bromate, dms., 1,000-lb. lots or more, works	lb.	.50	—
dms., smaller lots, works	lb.	.52	.62
Potassium bromide, USP, gran., bbls., kgs	lb.	.39	.40
Potassium carbonate, dom., NF, gran., bbls. dms	lb.	.20	—
Dom., tech. powd., bbls., dms	lb.	.21	.22
Dom., calcinated, bgs., c.l., works, 100 lbs.		8.50	—
bgs., l.c.l., same basis 100 lbs.		9.55	—
Potassium carbonate, hydrated, 83-85%, bgs., c.l., works. 100 lbs.		7.10	—
bgs., l.c.l., works 100 lbs.		8.15	—
Potassium chlorate, cryst., dms., c.l., works	lb.	.12¼	—
dms., l.c.l., works	lb.	.13½	.14½
Powd., dms., c.l., works	lb.	.12¾	—
dms., l.c.l., works	lb.	.14	.15
works	lb.	.12¼	—
NF, cryst., dms., 2,000 lbs. or more, works	lb.	.16¾	—
NF, gran. 25-lb metal dms	lb.	.36	—
NF, powd., dms., 2,000 lbs. or more, works	lb.	.17¼	—
Potassium chloride indust., 99.9% KCL, bulk, c.l. works	ton	29.00	—
bgs., c.l., works	ton	33.50	—
99.3% KCL bulk, c.l., works	ton	27.00	—
bgs., c.l. works	ton	31.50	—
USP, cryst., dms.	lb.	.20	.22
USP, gran., dms.	lb.	.21	.23
USP, powd., dms.	lb.	.24	.26
Potassium chloride, agricultural (see Potassium muriate)			
Potassium chromate, tech., dms., works	lb.	.50	.51
Potassium citrate, NF, gran., 250-lb. dm., f.o.b. works E	lb.	.43	—
powd., 250-lb. dms., same basis.	lb.	.46	—
Potassium cyanide, dms. 20,000-lb. lots or more, works	lb.	.42½	—
dms., 2,000-19,999-lb lots, works.	lb.	.43	—
dms., smaller lots, works	lb.	.44	.44½
Potassium dichromate (see Potassium bichromate)			
Potassium ferricyanide, dms., ton lots, works	lb.	.50	—
dms., smaller lots, works	lb.	.65	—
Potassium ferrocyanide, dms., ton lots	lb.	.24½	—
dms., smaller lots	lb.	.29	—



Imaginative thinking

produced a better

CALCIUM GLUCONATE
(U.S.P.)

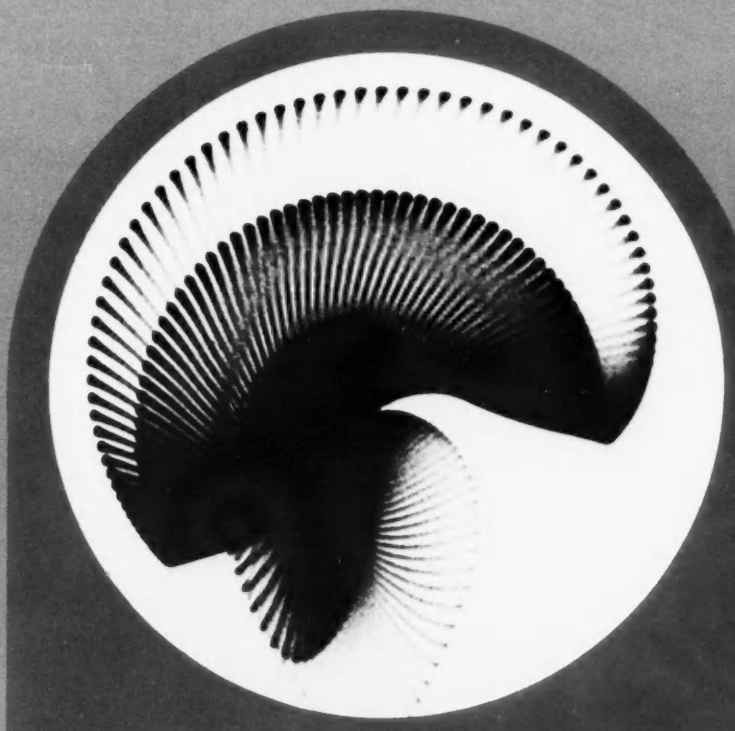
Mallinckrodt alone makes calcium gluconate electrolytically, with the single purpose of giving you a fine product adaptable for easy tableting or capsuling and unsurpassed for yielding clear, stable parenteral solutions.

Mallinckrodt®

Imaginative...
We use tradition
as a spur to
greater
achievement,
developing
in our
products
of today
the potential
of tomorrow.
Today we meet
our standards-
tomorrow we
exceed them.
After 91 years,
it's a habit.

Mallinckrodt®

MALLINCKRODT CHEMICAL WORKS, SECOND & MALLINCKRODT STREETS, ST. LOUIS 7, MO.
72 GOLD STREET, NEW YORK 8, N. Y. • CHICAGO • CINCINNATI • CLEVELAND • DETROIT • LOS ANGELES
PHILADELPHIA • SAN FRANCISCO • IN CANADA: MALLINCKRODT CHEMICAL WORKS, LIMITED • MONTREAL • TORONTO



Imaginative...
We use tradition
as a spur to
greater
achievement,
developing
in our
products
of today
the potential
of tomorrow.
Today we meet
our standards-
tomorrow we
exceed them.
After 91 years,
it's a habit.

Mallinckrodt®

MALLINCKRODT CHEMICAL WORKS, SECOND & MALLINCKRODT STREETS, ST. LOUIS 7, MO.
70 GOLD STREET, NEW YORK 8, N. Y. • CHICAGO • CINCINNATI • CLEVELAND • DETROIT • LOS ANGELES
PHILADELPHIA • SAN FRANCISCO • IN CANADA: MALLINCKRODT CHEMICAL WORKS, LIMITED • MONTREAL • TORONTO

Potassium fluoborate, fib dms., c.l., works lb. .30 - —
fib. dms., l.c.l., works ..... lb. .31 - —
Potassium fluoride, dms., works lb. .37 - .38
Potassium gluconate, 100-lb. dm., f.o.b. works E lb. 1.67 - —
Potassium guaiacol sulfonate, NF, dms lb. 2.10 - 2.30
Potassium hydroxide, tech. (see Potash caustic).
Potassium hydroxide, USP, pellets, 100-lb. dms., l to 100-dm. lots lb. .33½- .38
Potassium hypopnosphite, NF, fib. dms., 1,000-lb lots lb. 1.38 - —
Potassium iodide, USP, cryst., gran., or powd., 250-lb. dm., f.o.b. works lb. 1.40 - —
Potassium manure salt, 22% K₂O, bulk, c.l., works unit-ton. .17 - .1765
Potassium metabisulfite, gran., dms. lb. .16 - —
Powd., dms. ..... lb. .27 - —
Potassium muriate, standard, bulk, c.l., works unit-ton. .31 - .33
bagged, 60% minimum K₂O, same basis ton 23.50 -24.60
Gran., bulk, c.l., works unit-ton. .31½ .33½
bagged, 60% minimum K₂O, same basis ton 23.80 -25.00
Inside prices apply to material contracted for prior to July 1, 1959.
Outside prices apply to material contracted for after that date but also for delivery during the current month.
Potassium nitrate, NF, cryst., bbls., 20-ton lots 100 lbs. 17.00 - —
bbls., smaller lots 100 lbs. 18.00 -19.00
NF, gran., bgs., 20-ton tots. 100 lbs. 9.50 - —
bgs. smaller tots 100 lbs. 11.00 -12.00
NF, powd., bgs., 20-ton tots. 100 lbs. 10.50 - —
bgs. smaller tots 100 lbs. 12.00 -13.00
Potassium oxalate, neutral, tech., fine gran., powd., 300-lb. dm., f.o.b. works E lb. .32 - —
Potassium pentaborate, gran., dms., c.l., works ton 219.50 - —
dms., ton lots, ex whse. ton 311.00 - —
dms., smaller lots ex whse ton 316.00 - —
Powdered potassium pentaborate $10 per ton higher.
Potassium perchlorate, dms., c.l., works lb. .18½- —
dms., l.c.l., works ..... lb. .19 - .20
Potassium permanganate, coml., kgs., works lb. .25 - .33
USP, dms., works ..... lb. .29 - .35
Potassium persulfate, dms., c.l., works lb. .17½- —
dms., l.c.l., works ..... lb. .18 - .21
Potassium pyrophosphate, tetrabasic, dms., works lb. .15½- .18½
Potassium prussiate red (see Potassium ferro-cyanide).
Potassium prussiate yellow (see Potassium ferro-cyanide).
Potassium silicate, electrical grade, 30° Be, 1:2.0, dms., c.l., works 100 lbs. 6.50 - —
dms., l.c.l., 5 dm. lots or more, works 100 lbs. 7.25 - 7.65
tanks, works ..... 100 lbs. 6.15 - —
40.5° Be, 1:2.1, dms., c.l., works. 100 lbs. 5.95 - —
dms., l.c.l., 5 dm. lots or more works 100 lbs. 6.70 - —
tanks, works 100 lbs 5.60 - —
Glass grade, bgs., c.l., works. 100 lbs. 17.30 -18.15
bgs., l.c.l. works 100 lbs. 17.80 - —
Soln., 29° Be, 1:2.5, dms., c.l., works. 100 lbs. 4.95 - —
dms. l.c.l., 5-dm. lots or more, works 100 lbs. 5.70 - —
tanks, works 100 lbs. 4.60 - —
Potassium silicofluoride, bgs., works lb. .09½- .10
Potassium silicofluoride in drums, 0 4c. per lb. higher.
Potassium stannate, dms., frt. alld. E lb. .780 - .853
Potassium sulfate, agricultural, bulk, c.l., works unit-ton. .64½- .66½
Inside price applies to tonnage contracted for prior to July 1, 1959.
Outside price applies to tonnage contracted for after that date but also for delivery during the current month.
Potassium sulfate, NF VII, cryst., dms lb. .31 - .33
NF VII, gran., dms ..... lb. .18½- —
NF VII, powd., dms ..... lb. .16 - .17
Potassium sulfocyanate, NF, cryst. (see Potassium thiocyanate).
Potassium thiocyanate, NF, cryst., dms., works lb. .96 - .98
Tech., dms., works ..... lb. .77 - .79
Potassium titanate, ctns., c.l., works. lb. .16¼- —
ctns., 5-ton lots, works ..... lb. .16½- —
ctns., 1-ton lots or less, works lb. .16¾- —
Potassium-magnesium sulfate, basis 40% K_2SO_4 and 18% MgO, bulk, works, base price ton 13.45 - —
bulk, works, July forward ton 14.00 - —
Potassium-sodium tartrate, NF, gran. or powd., 250-lb. dms., c.l., f.o.b. works E lb. .42½- —
250-lb. dms., 5,000-lb. lots, same basis lb. .43 - —
250-lb. dms., same basis lb. .43½- —
Potassium-titanium fluoride, fib. dms., works lb. .39 - .40
Potassium-zirconium fluoride, fib. dms., c.l., works lb. .50 - —
fib. dms., l.c.l., works ..... lb. .52½- .55
Pregnenolone, bots ..... gram. No prices
Pregnenolone acetate, bots. ... gram. No prices
Procaine hydrochloride, USP, dms., 1,000-lb. lots, frt. alld. lb. 2.25 - —
dms. 100-500 lb. lots .... lb. 2.95 - 3.15
Progesterone, USP, bots. ... gram. No prices.
Progesterone acetate, bots. ... gram. No prices.
Propenyl guaethol, dms. ..... lb. 24.30 -27.00
Propionic acid, syn. pure, dms., c.l., works lb. .23¼- —
dms., l.c.l., works ..... lb. .24¼- —
tanks, works ..... lb. .20¾- —
n-Propyl acetate, dms., c.l., dlvd. lb. .14¾- —
dms., l.c.l., dlvd. ..... lb. .16¼- —
tanks, dlvd. ..... lb. .12¼- —
n-Propyl alcohol, dms., c.l., dlvd lb. .14 - —
dms., l.c.l., dlvd. ..... lb. .15½- —
tanks, dlvd. ..... lb. .11½- —
n-Propyl gallate, dms., 100 to 2,000-lb. lots, works lb. 3.90 - 4.40
n-Propyl-p-hydroxybenzoate, USP, dms lb 2.30 - 2.40
Propyl thiouracil, bots., 50 kilo lots or more kilo. 55.00 - —
bots., smaller lots ..... kilo. 55.10 -55.30
n-Propylamine, dms., c.l., dlvd lb. 1.24 - —
dms., l.c.l., same basis ..... lb. 1.255 - —
Propylene dichloride, consumers' dms., c.l., dlvd. E lb. .0845- —
dms., l.c.l., same basis ..... lb. .0995- —
tanks, same basis ..... lb. .07 - —
Propylene dichloride prices in West 1c. higher, same basis.
Propylene glycol, indust., dms., c.l., dlvd. E lb. .16 - —
dms., l.c.l., same basis..... lb. .17½- —
tanks, same basis..... lb. .13½- —
USP, dms., c.l., dlvd. E ..... lb. .18 - —
dms., l.c.l., same basis..... lb. .19¼- —
tanks, same basis..... lb. .15½- —

Propylene glycol methyl ether, dms., c.l., dlvd. lb. .20 - —
dms., l.c.l., same basis..... lb. .21 - —
tanks, same basis..... lb. .18¼- —
Propylene oxide, dms., c.l., dlvd. E. lb. .18 - —
dms., l.c.l., dlvd. E ..... lb. .19¼- —
tanks, dlvd. E ..... lb. .15½- —
Psyllium seed, black, bgs..... lb. .30 - .33
Blonde bgs. ..... lb. .18 - .20
Husks, bgs. ..... lb. .42 - .45
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03⅝- .04¼
bgs., smaller lots ..... lb. .03⅞- —
Imp., Italian, silk-screen, coarse, bgs., ton lots lb. .03½- —
fine, bgs. ton lots ... lb. .04 - —
sun dried, coarse, bgs ton. 60.00 - —
fine, bgs. ..... ton. 60.00 -70.00
Pumpkin seed, bgs. ..... lb. .25 - .26
Pyrethrins, syn. (see Allethrin).
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bgs., ton, works lb. .50 - —
Powd., 1.3% pyrethrins, bags, ton, works. lb. .71 - —
Pyrethrum liquid, 20/1 basis (2 grams pyrethrins per 100cc odorless base), dms., works gal. 9.60 - 9.80
100/1 basis (10 grams pyrethrins per 100cc odorless base). dms., works gal. 45.90 -46.90
Pyrethrum oleoresin, dewaxed, 20% dms., works lb. 11.00 -11.35
purif., 20%, dms., works ... lb. 11.00 -11.35
Pyridine, denat., dms. c.l., works and frt. equald gal 2.77 - —
dms. l.c.l., same basis ..... gal 2.80 - —
Refd., 2°, non-ret. dms., l.c.l., same basis lb. .70 - —
tanks, same basis ..... lb. .65 - —

Pyridoxine hydrochloride, USP, 500-gram bots., dms., f.o.b. works, kilo. 175.00 - —
Pyrites, Canadian, 48-50% S, mines, long-ton. 5.00 - 6.00
Pyrocatechol (see Catechol)
Pyrogallic acid, NF (see Pyrogallol).
Pyrogallic acid, tech., bbls. ..... lb. 3.17 - 3.25
Pyrogallol, NF, 100 lb. dms. .... lb 3.50 - —
Pyroxylin, USP, bots. ..... lb. 9.50 - —

Q

Quassia chips ..... lb. .10 - —
Quicksilver (see Mercury metal)
Quince seed, bgs ..... lb. 1.15 - 1.50
Quinidine sulfate, USP, cns ... oz. .74½- .77
Quinine, NF, cns., 100-oz. lots ... oz. .34 Nom.
Quinine bisulfate, USP. cns ..... oz. .27½- .29
Quinine hydrochloride cns..... oz. .23 - .25
Quinine sulfate, USP, cns ..... oz. .24½- .26
Quinoline, dms., c.l., frt. equald lb .50¾ —
dms., l.c.l., same basis..... lb. .51¼- —
tanks, same basis ..... lb. .50 - —

R

R salt, paste, dms frt. alld., 100% basis lb. .98 - —
Powd., frt. alld. 100% basis lb. 1.08 - —
Rapeseed oil, dms. ..... lb. .15 - .15¼
tanks ..... lb. .13 - —
Rare earth chloride, 46%, dms., dlvd lb. .25 - —
Rare earth oxalate, 45-50%, bgs., works lb. 1.15 - —
Rauwolfia serpentina root, powd., bbls., dms lb. 1.00 - 1.20
Red carmine, No. 40 (see Carmine).
Red oil (see Oleic acid)

RED PIGMENTS
Red pigment quotations are listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner.

Red precipitate (see Mercuric oxide, red).
Reserpine, cryst., bots ..... gram 1.25 - —
Resorcinol, tech grade, dms., c.l., works, frt. equald lb. .77½- —
dms., l.c.l., same basis..... lb 78½- —
USP, powd., dms., works .... lb. 2.95 - —
Resorcinol monoacetate, NF, dms. lb. 2.50 - —
Rhatany root, bgs. ..... lb. .14 - .16
Rhodamine red toner, molybdated, PMA, kgs., works lb. 6.00 - —
Tungstated, PTMA, works, kgs lb 6.60 - —
Rhodinol, 5-lb. cans..... lb. 42.00 -51.00
Synthetic ..... lb. 14.00 -16.00
Rhubarb root, India whole, bgs lb. .25 - —
powd., bgs. ..... lb. .35 - —
Riboflavin, USP, fib. dms., kilo or more, dlvd kilo. 36.00 - —

SOLVAY TECHNICAL AND ENGINEERING SERVICE
First Edition—1st Printing—1959
Bulletin No. 15
CAUSTIC POTASH
Contains properties of caustic potash and its solutions . . . data on unloading, handling, dissolving . . . conversion tables . . . wall chart of handling precautions.
Features vital facts, tables, diagrams for applying caustic potash with maximum effectiveness and safety!
Announcing!
NEW SOLVAY TECHNICAL BULLETIN
For all Caustic Potash users!
This basic reference work includes recognized source material.

Now America's foremost producer of alkalies—Solvay—brings you an authoritative, helpful source-book of the latest information on caustic potash. And it's a *completely new* addition to your Solvay reference library . . . in the great tradition of Solvay Technical and Engineering Service Bulletins.

Fill in the coupon for your copy, and indicate any other Solvay technical bulletins you might find useful.

Allied Chemical

SOLVAY PROCESS DIVISION
61 Broadway, New York 6, N. Y.

SOLVAY® branch offices and dealers are located in major centers from coast to coast.

BC-119

SOLVAY PROCESS DIVISION
ALLIED CHEMICAL CORPORATION
61 Broadway, New York 6, N. Y.

Please send me without cost your new Bulletin 15, Caustic Potash, as well as the other Solvay bulletins checked below.

- ☐ #4—Calcium Chloride in Refrigeration
- ☐ #5—Soda Ash
- ☐ #6—Caustic Soda
- ☐ #7—Liquid Chlorine
- ☐ #8—Alkalies and Chlorine in the Treatment of Municipal and Industrial Water
- ☐ #9—The Analysis of Alkalies
- ☐ #11—Water Analysis
- ☐ #12—The Analysis of Liquid Chlorine and Bleach
- ☐ #14—Chlorine Bleach Solutions
- ☐ #16—Calcium Chloride

Name_____
Position_____
Company_____
Phone_____
Address_____
City_____ Zone_____ State_____

Riboflavin, USP, readily soluble, bots., dlvd. kilo. 130.00 - —
Riboflavin, 5-phosphate-sodium fib. dms., kilo or more dlvd. kilo 104.50 - —
Rice bran oil, clarified, dms. t.c.l. lb. .15½- —
tanks, dlvd. E. lb. .13 - —
Ricinoleic acid (see Castor oil acids split).
Rochelle salt (see Potassium sodium tartrate).
Roofing pitch (see Coaltar pitch roofing).
Rose oil, nat., Bulgarian bots oz 72.00 —
Turkish, bots. oz. 55.00 -58.00
Rosemary oil, Spanish, NF, cns., dms lb .97 1.20
Spanish, tech., cns., dms. lb. .50 - 1.20
Rosin, gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib, dms., works, unit-lb. .12 - —
Resin, 25-45% fib dms. works, unit-lb. .12 - —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .03¾- —
bgs., ton lots same basis lb. .04¼- —
Rubber solvent, petroleum, tanks, Calif. ex tax, San Francisco gal. .175 - —
tanks, east coast, N. J., N. Y. gal. .19 - —
tanks, group 3 gal. 13875 - —
Rue oil, bots lb 2.75 3.00
Rutin, NF, fib dms., 10 kilo lots kilo. 13.75 - —
fib. dms., 5 kilo lots kilo 14.00 - —
fib. dms., 1 kilo kilo. 14.50 - —
Ryania, 100%, powd., bgs., c.l., works lb. .22 - —
bgs., t.c.l., same basis lb. .24 - —

S

S acid, bbls., works lb 3.25 - —
Sabadilla seed, activated, ground with lime, bbls lb. .42 - .44
Saccharin, calcium, fib dms., 1,000-lb lots, works lb 2.50 - —
USP, gran., soluble, dms., 1,000-lb. lots lb. 1.40 - —
dms., smaller lots lb. 1.50 - —
USP, powd., soluble, insoluble, dms., 1,000-lb. lots lb. 1.45 - —
dms., smaller lots lb. 1.55 - —
USP, powd., insoluble, dms., 1,000-lb. lots lb. 1.43 - —
dms., smaller lots lb. 1.53 - —
Safflower oil, dms., New York lb. .1785- .1830
tanks, Atl. Coast lb. .1585- —
Saffron, Mancha Superior, tins lb. 25.00 - —
Safrol, dms. lb. .70 - —
Sage, Dalmatian, bgs. lb. .40 - —
Greek, cns. lb. .16 - —
Italian, cns. lb. .18 - —
Sage oil, clary, bots. lb. 20.00 -30.00
Dalmatian, cns. lb. 3.25 - 3.60
Spanish, cns. lb. 1.25 - 1.75
Sal soda (see Soda sal).
salicylaldehyde, dms., c.l., t.l., f.o.b. plant, frt. equald lb 1.23 - —
dms., t.c.l. same basis lb 1.25 - —
Salicylamide, 100-lb dms lb 1.05 - —
Salicylic acid, crude, fib dms., c.l., t.l., frt alld lb. .37½- —
fib. dms. t.c.l., frt. alld. on 100 lbs. or more lb. .38½- —
Sublimed, tech, fib dms., c.l., t.l. dlvd lb. .39¼ —
fib dms., t.c.l dlvd lb. 43½- —
USP, cryst., 200-lb. fib. dms., 1,000 lbs. or more lb. .50½- —
200-lb fib. dms., less than 1,000 lbs lb. .53½- —
100-lb. fib. dms., 1,000-lbs or more lb. .52½- —
100-lb fib. dms., less than 1,000 lbs. lb. .55½- —
USP, powd., 100-lb. fib. dms., 1,000 lbs. or more lb. .57½- —
100-lb fib dms., less than 1,000 lbs lb. .60½- —
Salol, NF gran., bbls. kgs lb 1.20 - —
Powdered salol, 25c per lb higher
Salt, rock, paper bgs., c.l., 100 lbs 1.09 - —
Salt, table vacuum, common, fine, paper bgs. c.l 100 lbs 1.34 - —
Saltcake, dom. bulk, works, 100% Na2SO4 basis ton. 28.00 - —
Saltpeter (see Potassium nitrate)
Sandalwood, E. Indian chips, bgs. lb. .65 - .66
powd. fib. dms. lb. 75 - .76
Sandalwood oil, cns. lb. 14.75 -16.50
Sarcosine, tech, tanks, f.o.b., works, frt equald lb. 1.03 - —
Sardine oil, crude, tanks, Pac. coast. lb. No stocks
Sassafras oil, artif., dms. lb. .43 - —
Nat., dom., dms lb. 1.45 - 2.15
Savin oil, USP, cns lb 4.50 5.25
Savory oil, cns lb. 4.75 - —
Schaeffer's salt, paste, dms, frt. alld. 100% basis lb. .85 - —
Powd. bgs., frt. alld. 100% basis. lb. .95 - —
Scopolamine hydrobromide, USP, bots oz. 13.00 - —
Sebacic acid, CP, bgs., c.l., works. lb. .69½- —
bgs., t.c.l., works lb. .71½- —
Purified, bgs., c.l., works lb. .65½- —
bgs., t.c.l., works lb. .67½- —
Seidlitz mixture, fib dms, 5,000-lb. lots lb. .30½- —
fib. dms., smaller lots lb. .31 - .32
Selenium, powd., 99½% dms., dlvd. lb 7.00 - —
Senega root, bls. lb. 3.00 - 3.25
Senna leaves, Alexandria, whole and half, bls lb. .22 - —
siftings lb. .16 - —
Tinnevelly, No. 1, bls lb. .22 - —
No. 2, bls. lb. .18 - —
No. 3, bls. lb .14 - —
pods, bls. lb. .28 - —
powd., bbls., bxs. lb. .17 - —
Serpentaria root, bls. lb. 6.50 - —
Sesame oil, USP, dms. lb .32 - .39
Sesame seed, Colombian, bgs. lb. .15½- —
Lebanese, hulled, bgs. lb. .19 - —
Nicaraguan, hulled, bgs lb. .21½- —
nat., bgs. lb. .14 - —
Salvadorian, nat., bgs lb. .13 - —
Shellac, bleached, bonedry, bgs., 1,500-lb. lots lb. .46 - —
bbls., 1,500-lb. lots lb. .47 - —
kgs., 1,500-lb. lots lb. .48 - —
Bonedry shellac prices for less than 1,500-lb. lots 1c. per lb. higher for all packages.
Shellac, bleached, refd., bgs., 1,500-lb. lots lb. .56 - —
bbls., 1,500-lb. lots lb. .57 - —
kgs., 1,500-lb. lots lb. .58 - —
Shellac, orange, lemon No. 1, bgs., 10-bg. lots lb. .37 - .39
lemon No. 2, bgs., 10-bg. lots. lb. .34 - .37
superfine, bgs., 10-bg. lots lb. .32 .34
Shellac in 1 to 10-bg. lots 1c. per lb. more.
Shingle stain oil, tar distillate, dms., c.l., works gal. .37 - —
dms., t.c.l., works gal. .48 - —
tanks, works gal. .25 - —

Sienna pigment, burnt, paper bgs., c.l., works lb. .06½- .18½
paper bgs., t.c.l., works lb. .06¾- .17¾
Raw, paper bgs., c.l., works lb. .06¾- .16¾
paper bgs., t.c.l., works lb. .07 - .17
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works ton. 25.00 - —
bgs., t.c.l., works, ex whse. ton. 45.00 -55.00
Hard-quartz, 99½%, 325 mesh., bgs. c.l., works ton. 20.00 - —
bgs, t.c.l., works ton. 25.00 - —
99½%, 140 mesh, bgs., c.l., works ton. 15.00 - —
bgs., t.c.l., works ton. 20.00 - —
Silicon tetrachloride, tech., dms., c.l., works lb. .18 - —
dms., t.c.l., works lb. .22 - .30½
tanks works lb. 17 - —
Silver bullion, ingots, cs. Troy oz. .91⅛- —
Silver cyanide, bots., 1,000-oz. lots, oz. .94¼- —
bots., 500-oz. lots oz. .95¼- —
bots., 100-oz. lots oz. .96¼- —
Silver nitrate, CP, cryst., bots., 3,000-oz. lots oz. .67¼- —
dms., 1,000-oz. lots oz. .67¾- —
bots., 250-500-oz. lots oz. .68¾- —
USP granular silver nitrate 4c. per oz. higher.
Silver proteinate, mild, USP, bots., dms., 1,000-oz. lots oz. 1.15 - —
Strong, NF, bots., dms., 1,000-oz. lots oz. 1.10 - —
Snakeroot oil, Canada, cns. lb. 40.00 -43.00
Soapbark, crushed, bls. lb. .30 .35
Powd., bls. lb. .35 .40
Whole, bls. lb. .20 .25
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 - —
paper bgs., t.c.l., stock pts., 100-lbs. 3.00 - 4.77
bulk, c.l., works 100 lbs. 1.60 - —
Light, 58%, paper bgs., c.l., works 100 lbs. 1.85 - —
paper bgs., t.c.l., stock pts. 100 lbs. 3.95 - 4.72
bulk, c.l., works 100 lbs. 1.55 - —
Soda, caustic, flake, 76%, dms., c.l., works, frt. equald 100 lbs. 5.20 - —
liq. 50%, sellers' tanks, works, dry basis 100 lbs. 2.90 - —
50%, rayon type, sellers' tanks works, dry basis 100 lbs. 2.90 - 3.00
73% sellers' tanks, works, dry basis 100 lbs. 3.00 - —
73%, rayon type, sellers' tanks, works, dry basis. 100 lbs. 3.00 - 3.10
solid, 76%, dms., c.l., works. 100 lbs. 4.80 - —
Soda, sal, conc., bgs., c.l., works, 100 lbs. 2.50 - —
bgs. smaller lots, works 100 lbs. 2.80 - —
Sodium acetate, anhyd., bgs., c.l., dlvd. E lb. .14½- —
NF, 60% gran., dms. c.l., works. lb. .15½- —
dms., t.c.l., works lb. .17½- —
Sodium alginate, NF, white powd., dom., 300 lbs or more lb. 1.02 - —
Sodium p-aminosalicylate, dms., 100-lb. lots or more frt. adjusted lb. 1.90 - —
Sodium antimoniate bgs., c.l. dlvd. E lb. .25½- —
bgs., t.c.l. dlvd E lb. .27 - —
Sodium arsenate, 60% arsenic pentoxide, dealers, dms., ton or more, works lb. .26 - —
dms. less than ton lots, works lb. .26½- —
Sodium arsenite, 90% pink powder, 75% arsenious oxide, dealers, dms., ton lots or more, works lb. .17½- —
dms., less than ton lots, works lb. .18 - .19
Sodium ascorbate, dms., 25-50 kilo dms., f.o.b. works kilo. 10.00 - —
10-kilo dm., same basis kilo. 10.35 - —
5-kilo dm., same basis kilo. 10.75 - —
1-kilo bot., same basis kilo. 11.00 - —
Sodium benzoate, tech., dms., c.l., t.l., frt. alld lb. .35 - —
dms., t.c.l., same basis lb. .39 - —
USP, dms., c.l., t.l. frt. alld lb. .39 - —
dms., ton lots, same basis lb. .43 - —
dms., 1,000-lb lots, same basis. lb. .45 - —
Sodium bicarbonate, USP, gran., bgs., c.l., works 100 lbs. 2.95 - —
bgs., t.c.l., works 100 lbs. 3.85 - —
USP, powd., bgs., c.l., works. 100 lbs. 2.55 - —
bgs., t.c.l., works 100 lbs. 3.45 - —
Sodium bichromate, gran., bgs., c.l. t.l., works lb. .13 - —
bgs., t.c.l., works lb. .13½- .14¼
Sodium bichromate in dms. ¼c. per lb. higher
Sodium bifluoride, bbls. c.l., works, frt. equald lb. .19¼- —
bbls., t.c.l., same basis lb. .2025- —
Sodium bisulfate, bulk, c.l., works. 100 lbs. 2.00 - —
dms., c.l., frt. equald 100 lbs. 3.00 - 3.60
dms., t.c.l., frt. equald 100 lbs. 3.50 - 4.10
Sodium bisulfite, anhyd., bgs., c.l., works 100 lbs. 5.00 - —
bgs., t.c.l., works 100 lbs. 5.45 - —
Soln., 35° bbls., c.l., works 100 lbs. 1.70 - —
bbls., t.c.l., works 100 lbs. 2.20 - —
Sodium borate (see Borax)
Sodium borohydride, powd., dms., t.c.l., works lb. 33.00 -40.00
dms., c.l., works lb. 19.90 - —
Sodium borohydride, stabilized water soln., 12% NaBH4, 100% basis, dms., works lb. 15.00 - —
Pelletized sodium borohydride $1 per lb higher in 1,000-lb lots.
Sodium bromide, USP, gran., dms., works lb. .40 - —
Sodium carbonate, cryst., monohydrated (see Soda, sal)
Sodium carbonate, monohydrated, bgs., c.l., works 100 lbs. 3.10 - —
bgs., t.c.l., works 100 lbs. 3.50 - —
Sodium carboxymethyl cellulose (see CMC).
Sodium chlorate, cryst., 350-lb. dms., c.l., works lb. .09 - —
dms., t.c.l., works lb .09½- .10½
Sodium chlorate in 100-lb. dms., only, ¼c. per lb. higher.
Sodium chloride, tech. (see Salt).
Sodium chloride, USP, gran., bgs. lb. .05 - —
Sodium chlorite, tech., dms., c.l., works lb. .58 - —
dms., 20-dm. lots or more, works. lb. .66 - —
dms., smaller lots, works lb. .70 - .73
Sodium chloroacetate, tech., dms., c.l., works lb. .27 - —
dms., t.c.l. works lb. .28 - —
Sodium chromate, anhyd., fib. dms., c.l., t.l., works lb. .14¾- —
fib. dms. t.c.l., works lb. .15¼- .16½
Sodium chromate, tetrahydrate, bgs., c.l., t.l., works lb. .1015- —
bgs., t.c.l. lb. .1065- .1190

Sodium citrate, anhyd., 300-lb. dm., f.o.b. works E lb. .62 - —
NF VIII, gran., bgs., c.l., same basis lb. .26 - —
USP XIV, gran., bgs., c.l., same basis lb. .29 - —
Sodium citrate USP powd prices ½c. higher.
Sodium cyanate, dms., 1,000-lb. lots, works lb. .85 - —
dms., smaller lots, works lb. .90 1.10
Sodium cyanide, flake, 96-98%, dms., c.l. or 20,000-lb. lots lb. .193 - —
dms., over 1,000-lb lots lb. .203 - —
dms., 100-lb to 1,000-lb lots lb. .213 - —
Gran sodium cyanide 1c higher.
Sodium cyclamate, 100-lb dm., f.o.b. works lb. 1.95 - —
Sodium diacetate anhyd., 39-41% acetic acid, dms., c.l., works lb. .18 - —
250-lb dms., t.c.l. works lb. .18¾- —
Tech., 33-35% acetic acid, dms., t.c.l., works lb. .15 - —
250-lb dms., t.c.l., works lb. .15¼ —
Sodium dimethyl dithiocarbamate, 40% soln. dms. c.l., t.l., frt alld., 100% basis lb. .42 - —
dms., t.c.l., t.l.l., same basis lb. .47 - .52
tanks, same basis lb. .38 - —
Sodium ferrocyanide, bgs., 10-ton lots lb. .13½- —
bgs., smaller lots lb. .14¾- —
Sodium fluoride, white, 97%, fib. dms., c.l., works, frt. equald lb. .1390- —
fib. dms. t.c.l., works, frt. equald lb. .1465- —
Sodium formate, bgs., c.l., works. 100 lbs 7.06 - —
bgs. t.c.l., ex whse. 100 lbs 8.65 - —
Sodium gentisate, 100-lb fib dms. lb 5.50 - —
Sodium gluconate, refd., 250-lb. dm., f.o.b. works E lb. .84 - —
Tech. bgs., c.l. t.l. same basis lb. .34 - —
Sodium hydride, 50% soln. in oil, dms., works lb. 1.25 2.50
25% soln. in oil, dms. 50 lbs or less, f.o.b shipping point lb 2.20 - —
dms., 50-99 lbs., same basis lb. 1.77 - —
dms., 100-999 lbs., same basis. lb. 1.20 - —
dms., 1,000 lbs. or more, same basis lb. .95 - —
Sodium hydrosulfide (see Sodium sulfhydrate).
Sodium hydrosulfite dms. c.l., frt. alld lb. .22½- —
dms. t.c.l. frt. alld. lb. .24¾- —
Sodium hydroxide, NF pellets 100-lb dms. 1 to 100-dm lots. lb. .23½- .28
Sodium hydroxide, tech (see Soda, caustic).
Sodium hypophosphite, NF, dms., 1,000-lb lots lb. .97 - —
Sodium hyposulfite (see Sodium thiosulfate).
Sodium iodide, USP, 300-lb. dm., f.o.b. works lb. 1.98 - —
Sodium lauryl sulfate, dms., c.l., dlvd lb. .20½- —
dms., t.c.l., dlvd lb. .21½- —
tanks, dlvd. lb. .19½- —
Sodium lignin sulfonate, bgs., c.l., works 100 lbs. 4.25 6.50
t.c.l., bgs., works 100 lbs 4.40 - 7.00
Sodium metabisulfite (see Sodium bisulfite)
Sodium metaborate octahydrate, gran., bgs., c.l. works ton 102.00 - —
bgs., ton lots, ex whse 100 lbs. 8.00 - —
bgs., smaller lots, ex whse. 100 lbs 9.25 -11.25
Tetrahydrate, bgs., c.l., works ton. 210 - —
bgs., ton lots, ex whse 100 lbs. 13.93 - —
bgs., smaller lots, ex whse. 100 lbs. 15.18 -17.18
Sodium metallic bricks, c.l. works. lb. .21 - —
Fused, 18,000-lb. lots or more, works lb. .19½- —
tanks, works lb. .17 - —
Sodium metalinate, bbls., frt. alld. lb. .62 - —
Sodium metaphosphate, bgs., c.l., f.o.b. shipping pt. 100 lbs. 11.10 - —
bgs., t.c.l., same basis 100 lbs. 11.85 - —
dms., c.l., same basis 100 lbs. 11.70 - —
dms., t.c.l., same basis 100 lbs. 12.45 - —
Sodium metasilicate anhyd., bgs., c.l., works 100 lbs 5.70 - —
bgs. 6,000-19,900 lb lots works. 100 lbs 6.05 - —
dms., c.l., works 100 lbs 6.20 - —
dms., t.c.l. works 100 lbs 6.55 - —
Sodium metasilicate pentahydrate, bgs., c.l., works 100 lbs 4.45 - —
bgs., t.c.l., works 100 lbs 4.80 - 6.75
dms., c.l., works 100 lbs 4.95 - —
dms., t.c.l., works 100 lbs 5.30 - 7.25
Sodium molybdate, anhyd., dms., works, frt. equald lb. .92 - .99
Cryst., dms., works, frt. alld lb. .74 - .76
Sodium monoglutamate (see Monosodium glutamate).
Sodium monohydrate (see Sodium carbonate, monohydrated).
Sodium naphthionate, bbls., lb. .70 - —
Sodium nitrate, dom., crude, bgs., c.l. works ton. 48.00 - —
bulk, c.l., works ton. 44.00 - —
Imp., crude, 100-lb. bgs., c.l., Atl., Gulf, Pac., whse ton. 48.00 - —
bulk, c.l., same basis ton. 44.00 - —
Sodium nitrite, USP, bbls., c.l., works, frt. equald 100 lbs. 9.00 - —
bbls., t.c.l., same basis 100 lbs. 11.00 - —
Sodium ortnosilicate, conc., dms., c.l., works 100 lbs. 6.70 - —
dms. t.c.l., works 100 lbs. 7.05 - 7.65
Hydrated, flake, bbls., c.l., works. 100 lbs. 5.65 - —
bbls, t.c.l., works 100 lbs. 7.60 - 7.90
Sodium oxalate, 98%, bgs., works. 100 lbs. 12.35 - —
Sodium para-aminobenzoate (see Sodium p-aminobenzoate).
Sodium para-aminosalicylate (see Sodium p-aminosalicylate).
Sodium pentachlorophenate, triquets, dms., c.l. works, frt. equald lb. .26 - —
dms., t.c.l., same basis lb. .27½- .34
Pellets, dms., c.l., same basis lb. .26 - —
dms., c.l., same basis lb. .27½- .34
Powd., dms., c.l., same basis lb. .25 - —
dms. t.c.l., same basis lb. .26½- .33
Sodium pentobarbital, USP, dms., 100 lbs. or more lb. 6.00 - —
Sodium perborate, NF, tech., bgs., c.l., works lb. .18½- —
bgs., t.c.l., works lb. .19 - .21
Sodium peroxide, dms., c.l., t.l., dlvd. E. of Miss lb. .21½- —
dms., t.c.l., same basis lb. .22 - .22½
Sodium phenobarbital, USP, 100-lb. dms lb 3.75 - —
Sodium phenosulfonate, USP IX, gran., dms lb. .52 - .53
NF, powd., dms lb. .55 - .56
Sodium phosphate, dibasic, anhyd., bgs., c.l., frt. equald. 100 lbs. 7.95 - —
bgs., t.c.l., same basis 100 lbs. 8.35 - 9.40

Sodium phosphate dibasic, duohydrate, bgs., c.l., frt. equald. 100 lbs. 7.60 - —
bgs., t.c.l., same basis 100 lbs 8.10 - —
USP, dried, powd., bgs., dms., works lb. .19 - .30¥
Monobasic, anhyd., bgs., c.l., frt. equald. 100 lbs. 9.00 - —
bgs., t.c.l. same basis 100 lbs 9.40 -10.00
Tribasic, anhyd., bgs., c.l., frt. equald. 100 lbs. 9.00 - —
bgs., t.c.l. frt. equald 100 lbs 9.45 -10.05
cryst., bgs., c.l., t.l. frt equald. 100 lbs. 4.60 - —
bgs. t.c.l., frt equald 100 lbs. 5.00 - 5.75
Sodium phosphate in dms 60c to 80c higher than bgs
Sodium picramate, tech paste, dms., f.o.b., works, frt. equald lb. .90 - —
Sodium prussiate, yellow (see Sodium ferrocyanide)
Sodium pyrophosphate acid, bgs., c.l., works, frt equald. 100 lbs 11.10 - —
bgs., t.c.l., same basis 100 lbs 11.85 -12.35
Sodium pyrophosphate, ferric, dms., c.l., t.l., works lb .36 - —
dms. t.c.l., works lb .37 - .39
Sodium pyrophosphate tetrabasic, anhyd., bgs., c.l., works, frt equald 100 lbs 7.81 - —
bgs., t.c.l., same basis 100 lbs 9.21 9.71
Sodium salicylate USP dms. 1,000-lbs or more lb. .78½ —
dms., less than 1,000 lbs dms. lb .81½- —
Sodium sesquicarbonate, bgs., c.l., works 100 lbs 2.35 - —
bgs., t.c.l., dlvd. zone 1 100 lbs 4.10 4.35
dlvd. zone 2 100 lbs 4.35 4.60
dlvd. zone 3 100 lbs 4.75 4.90
dlvd zone 4 100 lbs 5.35 5.60

Sales zones are: (1) Atl. states E. of Miss., R and N of south bound of Ky and Va., Ala., La., and Miss. south of 31°; Tex E of 100°; S. of 31° Fla.; also Me., N. H. and Vt. in which there are special county zones; Davenport, Ia., and St. Louis, (2) Ark E of 98° Ga., Iowa (except Davenport) Minn., Mo. (except St. Louis) Neb E of 98° N. C., S. C., Tenn and Tex. N of 31 and E. of 100° (except Wichita Falls); also Ala., La and Miss. No of 31°; (3) Ark W of 98°, Kan., Neb W, of 98° N D., Okla., S. D., Tex., W of 100° (including Wichita Falls excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo and El Paso Tex.

Sodium sesquisilicate, anhyd., bgs., c.l., t.l., works 100 lbs. 5.70 - —
dms., c.l., t.l., works 100 lbs 6.20 - —
Hydrated, bgs., c.l., works 100 lbs. 5.00 - —
bgs., 6,000-19,900 lb lots, works. 100 lbs. 5.35 - —
dms., c.l., works 100 lbs. 5.50 - —
dms., 6,000-19,900 lb. lots, works. 100 lbs. 5.85 - —
Sodium silicate turbid, liq., 40° Be. 1:3.2, dms., c.l. works. 100 lbs. 1.55 - —
dms., t.c.l., works 100 lbs. 1.90 - 2.40
tanks, works 100 lbs 1.20 - —
47° Be., 1:2.9.9, turbid, dms., c.l., works 100 lbs. 2.25 - —
dms., t.c.l., works 100 lbs 2.60 - 3.45
tanks, works 100 lbs 1.90 - —
52° Be., 1:2.4, turbid, dms., c.l., works 100 lbs 2.65 - —
dms., t.c.l., works 100 lbs. 3.00 - 3.50
tanks, works 100 lbs 2.30 - —
Solid, 1:3.2, bgs., works ton. 67.50 - —
Sodium silicofluoride, bgs., c.l., works lb. .065 - —
bgs., t.c.l., works lb. .725 - —
Sodium silicofluoride in dms. 0.4c. per lb. higher.
Sodium stannate, dms., works, frt. alld. E. lb. .638 - .697
Sodium sulfa drugs (see Sulfa name).
Sodium sulfanilate, bbls., works lb. .23 - —
Sodium sulfate, NF VII, dried, powd., dms lb. .22½- —
Tech., anhyd., bgs., c.l., dlvd. E. ton. 54.00 - —
Tech., detergent, rayon grade, bgs., c.l., works ton. 36.00 - —
bulk, c.l., works ton. 32.00 - —
USP, cryst., fib. dms. lb. .17½- .18
Sodium sulfhydrate, flake, 70-72%, dms., c.l., works frt. equald. lb. .07¼- —
dms., t.c.l., same basis lb. .08¼- —
Liq., 40-44%, tanks, works, 100% basis ton. 130.00 - —
Sodium sulfide, flake, dms., c.l., works, E., frt. equald lb. .06 - —
dms., t.c.l., same basis lb. .07 - —
Fused, bbls., c.l., works, E., frt. equald lb. .05½- —
bbls., t.c.l., same basis lb. .06½- —
Sodium sulfite, anhyd., bgs., c.l. works 100 lbs. 7.55 - —
bgs., t.c.l., same basis 100 lbs. 7.95 - —
Tech., bgs., c.l., works 100 lbs. 3.00 - —
bgs., t.l., same basis 100 lbs. 4.00 - —
Sodium sulfocyanide, CP (see Sodium thiocyanate).
Sodium tetraborate (see Borax)
Sodium tetrasulfide, liq., 40% dms., c.l., works, frt. equald lb. .04½- —
dms., t.c.l., same basis lb. .05½- —
Sodium thiocyanate, CP, dms lb. .55 - .65
Tech., anhyd., dms., 1 ton lots or more, works lb. .317 - —
dms., less than ton lots, works lb. .337 - —
Sodium thiosulfate, NF, cryst. bbls. lb. .13½- —
Tech., anhyd., 100-lb. bgs., c.l., t.l., frt. equald. 100 lbs. 7.75 - —
100-lb. bgs., t.c.l., t.l.l., frt. equald 100 lbs. 8.15 - —
Tech., anhyd., photo grade, 64-lb. bgs., c.l., t.l., frt. equald. lb. .0775- —
64-lb. bgs., t.c.l., t.l.l., frt. equald lb. .0815- —
Tech., pentahydrate, photo grade, 100-lb. bgs., c.l., t.l., frt. equald. 100 lbs. 4.95 - —
100-lb. bgs., t.c.l., t.l.l., frt. equald. 100 lbs. 5.20 - —
Sodium titanate, ctns., c.l., works. lb. .14¼- —
ctns., 5-ton lots, works lb. .14½- —
ctns., 1-ton or less, works lb. .14¾- —
Sodium trichloroacetate, 94%, 100-lb. dms., c.l., frt. alld E. lb. .35 - —
50-lb. dms., c.l., frt. alld. E lb. .35½- —
10-lb cns., c.l., frt. alld. E. lb. .42 - —
Prices on Sodium trichloroacetate W. of the Rockies are 1¾c. per pound higher.
Sodium tripolyphosphate, bgs., c.l., works, frt equald 100 lbs. 8.16 - —
bgs., t.c.l., same basis 100 lbs. 8.56 - 9.06
Sodium trisilicate, powd., 1:3.2 bgs., c.l., works 100 lbs. 8.95 - —
bgs., t.c.l., works 100 lbs. 9.70 -13.13
dms., c.l., works 100 lbs. 9.45 - —
dms., t.c.l., works 100 lbs. 10.20 -10.60
Sodium tungstate, tech, kgs dlvd. E lb. 1.09 - —
Sodium-ammonium phosphate, purif., cryst., dms., works lb .52 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).

Sodium-formaldehyde sulfoxylate, dms., c.l., dlvd. lb. .21 • —
dms., l.c.l., same basis ..... lb. .21½ • —
Sodium-zirconyl sulfate, fib. dms., 1,000-lb. lots or more works lb. .28 • —
fib., dms., smaller lots, same basis lb. .30 • —
Solvent naphtha, coaltar, high-flash, tanks, frt. equald gal. .30 • .35½
Solvent naphtha, petroleum, aromatic, pure 312°-365°F b.r., 17.2°C m.a.p., tanks, New Jersey ..gal. .31 • —
315°-350°F b.r., 17.2°C, m.a.p., tanks, Texas City ....gal. .35 • —
342°-351°F, b.r., 15°C, m.a.p., tanks, Baytown, Texas gal. .29 • —
324°-349°F. b.r., 16.5°C, m.a.p., tanks, Houston .....gal. .29 • —
322°-350°F b.r., 17.2°C, m.a.p., tanks, Baytown, Tex. gal. .29 • —
352°-413°F b.r., 17.5°C, m.a.p., tanks, Houston .....gal. .30 • —
365°-404°F b.r., 19°C, m.a.p., tanks, New Jersey gal. .32 • —
367°-421°F. b.r., 20°C, m.a.p., tanks, Baytown, Tex. gal. .30 • —
Solvent naphtha, petroleum, partial aromatic, 211°-277°F. b.r., 23.8°C. m.a.p., tanks, New Jersey ..gal. .24 • —
205°-282° F. b.r., 38° C. m.a.p., tanks, New York, New Jersey gal. .28 • —
232°-325°F, b.r., 41.6°C, m.a.p., tanks, Houston ..gal. .25 • —
357°-403°F. b.r., 34°C, m.a.p., tanks, Houston .....gal. 26 • —
358°-401°F. b.r., 24.4°C, m.a.p., tanks, New Jersey ..gal. .38 • —
Sorbitan monostearate, tib. dms., 20,000-lb. lots, works lb. .33 • —
fib. dms., 10.000 to 20,000-lb. lots, works lb. .35 • —
fib. dms., smaller lots, works lb. .38 • .40
Sorbitan tristearate, fib. dms., 20,000-lb. lots, works lb. .34 • —
fib. dms., 10,000 to 20-000-lb. lots, works lb. .36 • —
fib. dms., smaller lots, works lb. .39 • .41
Sorbitol, NF, reg., 70% aqueous, dms., c.l., works..lb. .18 • —
dms., l.c.l., works.....lb. .19 • —
tanks, works .....lb. .16¼ • —
Resin grade, cryst., pellets, dms., c.l., works lb. .23 • —
dms., 1 to 5-ton lots, works, lb. .25 • .26
Powd., dms., c.l., works .....lb. .36 • —
dms., 1 to 5-ton lots, works, lb. .38 • .39
Soln., coml., aqueous, dms., c.l., works..lb. .24¼ • —
dms., ton lots, works ..lb. .25 • —
dms., smaller lots, works lb. .25¼ • —
tanks, works .....lb. .23¼ • —
Soya protein, chemically isolated, old process, bgs., c.l., works, lb. .23 • —
bgs., l.c.l., works .....lb. .23¼ • .23½
Chemically isolated, new process, bgs., c.l. works lb. .20 • —
bgs., l.c.l., works .....lb. .20¼ • .20½
Soybean meal, 44%, bulk, unrestricted, Decatur ..ton 59.00 • —
Soybean oil, crude, tanks, Decatur, lb. .07⅞ • —
Foots, soapstock, acid 95%, tanks, N. Y..lb. .05¼ • —
Refd., alkali, dms. .....lb. .1215 • .1240
tanks .....lb. .1015 • —
clarified, dms. .....lb. .1165 • .1190
tanks .....lb. .0965 • —
salad dms. .....lb. .1190 • .1215
tanks .....lb. .0990 • —
Soybean oil acids, dbl. dist., dms., lb. .18 • .20½
tanks .....lb. .15½ • —
S. D., dms .....lb. .16¾ • .19¼
tanks .....lb. .14¼ • —
Sparteine sulfate, cns. .....oz. .50 • —
Spearmint leaves, dom. bls. .... lb 75 • —
Spearmint oil, NF, dms..... lb. 6.25 • 8.75
Sperm oil, bleached, winter, 45°, dms lb. .1450 • .1550
tanks .....lb. .1250 • —
Nat., winter, 45°, dms. .....lb. .1350 • .1450
tanks .....lb. .1150 • —
Spermaceti wax, blocks, cs.... lb. .31 • .33
Cakes, cs ..... lb. .32 • .34
Spruce oil cns., dms. ..... lb 2.10 • 3.55
Squill, white, bls .....lb. .16 • .18
powd., bbls., bxs.....lb. .17 • .20
St. John's bread, edible, bls. ... lb. .17 • —
Stannic chloride, anhyd., dms., works..lb. .808 .830
Stanic oxide, dms., dlvd.....lb. 1.07½ • 1.08½
Stannous chloride, anhyd. dms., works...lb. 1.001 • 1.256
Hydrous, cryst., dms., works..lb. .86½ • .87½
Stannous sulfate, dms., works....lb. 1.056 • 1.076
Star root (see Helonias root).
Stargrass root (see Aletris root)
Stavesacre seed, bgs ..... lb. .60 .61
Stearic acid, dbl., pressed bgs. lb. .16¼ • .18¾
Single-pressed bgs. ..... lb. .15¾ • .18¼
Triple-pressed, bgs. ..... lb. .18 • .20½
Stearine, oleo (see Oleostearine)
Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York gal. .18 • —
tanks, western Pennsylvania, gal. .16 • —
tanks, group 3 .....gal. .13375 • —
tankwagon, Boston .....gal. .20 • —
Chicago .....gal. .299 • —
Cleveland .....gal. .23½ • —
Los Angeles, ex tax.....gal. .199 • —
Newark .....gal. .19 • —
New York .....gal. .19 • —
Philadelphia .....gal. .19½ • —
Pittsburgh .....gal. .19 • —
Stramonium leaves, bgs ..... lb. .15 • —
Streptomycin hydrochloride, bulk, gram. .04 • .041
Streptomycin sulfate, bulk...gram. .04 • .041
Strontium bromide, NF, cryst., 100-lb. dm., f.o.b. E lb. .92 • —
Strontium carbonate, pure, dms., 3-ton lots or more, works lb. .35 • —
dms., 1-ton lots, works..... lb. .37 • —
Tech., dms., works ..... lb. .19 • —
Strontium chromate fib. dms., dlvd. lb. .48 • —
Strontium iodide, jars, 25-lb. tots. lb 3.57 • —
Strontium nitrate bgs., c.l., works. 100 lbs. 11.00 • —
bgs., l.c.l., works .....100 lbs. 12.00 • —
Strontium salicylate, NF, dms. lb 1.88 • —
Strontium sulfate, air floated, 90%, 325 mesh, bgs., works ton 56.70 -66.15
Strophanthin G (see Ouabain, USP).
Strophanthin K, bots. ..... oz. 25.00 -25.50
Strophanthus seed, Kombi, biologically tested, bgs lb 3.50 3.75
Styrax gum, USP, cs..... lb. 4.50 • 5.50
Styrene monomer, polymer grade, 99.6% dms., c.l. frt. alld. lb. .17 • —
dms., c.l., same basis.... lb. .19 • —
tanks, same basis .....lb. .14¼ • —
Tech., 99.2%, dms., c.l. .....lb. .1458 • —
dms., l.c.l., same basis....lb. .1658 • —
tanks, bulk, same basis.....lb. .1208 • —

Above prices are escalated for each calendar quarter on the basis of cost of crude oil at the well, cost of petroleum refining labor, and prices in the three major sections of the Wholesale Commodity Price Index.

Styrolyl acetate, bots. .....lb. 1.25 • 1.45
Succinic acid, purif., cryst., bbls., works lb. .52 • .75
Sucrose, refd., white, bgs., refy E. lb. .0955 • —
Sucrose octa-acetate, denaturing grade, 100-200-lb. lots, bgs., l.c.l., works lb. 1.00 • —
Sugar (see Sucrose).
Sugar cane wax, dom., refd., slabs, 80-lb. ctns. works lb. .60 • .65
80-lb. ctns., spot... lb. .65 • .75
Sulfabenzamide, dms. ..... kilo 8.80 9.90
Sulfabenzamide-sodium, dms. . kilo 9.00 -10.10
Sulfacetamide, USP, fib dms. kilo. 6.61 6.83
Sulfacetamide-sodium, USP, fib. dms kilo 8.15 9.25
Sulfadiazine, USP, microcrystals, dms kilo. 23.35 -24.45
USP, powd., dms. ..... kilo. 22.60 -23.70
Sulfadiazine-sodium, USP, dms kilo. 24.80 25.90
Sulfaguanidine, NF X, dms. kilo 5.50 6.60
dms kilo. 23.50 -24.60
Sulfamerazine-sodium, USP, powd., dms kilo. 24.80 -25.90
Sulfamethazine, USP XV, microcrystals, dms kilo. 19.63 -20.75
USP XV, powd., dms .....kilo. 18 75 -19.85
Sulfamic acid, cryst., dms., c.l., t.l., works 100 lbs. 16.00 • —
dms., l.c.l., t.l., works 100 lbs. 17.50 -18.50
Gran., dms., c.l., t.l., works. 100 lbs. 14.75 • —
dms., l.c.l., t.l., works 100 lbs. 16.25 -17.25
Sulfanilamide, NF X, 30-80 mesh, dms kilo. 3.05 3.50
NF X, microcrystals, dms. .. kilo. 3.79 • 4.20
NF X, powd., dms. .....kilo. 2.85 • 3.30
Sulfanilamide quinoxaline, veterinary dms kilo. 16.28 • —
Sulfanilic acid, tech., dms. c.l., frt. alld lb. .21 • —
dms., l.c.l., frt. alld. ..... lb. .23 • —
Sulfapyridine, USP XV, powd. bots. tins kilo. 15.45 -16.55
Sulfapyridine-sodium, monohydrate, dms kilo 16.55 -17 65
Sulfathiazole, NF X, microcrystals, dms kilo 6.25 • 6.60
NF X, powd., dms. ..... kilo. 5.50 • 5.85
Sulfathiazole-sodium, NF X, dms., 1,000-lb lots or more lb 2.35 • —
Sulfur, coml., flour, bgs., mines, 100 lbs 2.35 • —
bbls. mines .....100 lbs 3.30 • —
lump, bgs., mines.....100 lbs 2.25 • —
bbls., mines .....100 lbs 2.80 • —
Sulfur, crude, dom., bright, bulk, f.o.b. cars, mines long-ton. 23.50 • —
Export, f.o.b. vessels Gulf ports long-ton. 25.00 • —
US and Canada f.o.b vessels Gulf ports long-ton. 25.00 • —
Domestic dark sulfur prices are $1 per long-ton lower
Sulfur, crude, imp., bulk, Mexican, filtered, f.o.b., vessel, Coatzacoalcos long-ton. 24.00 • —
Mexican dark sulfur price is $1 per long-ton lower.

Sulfur, refd., flowers, NF, bgs., mines ..100 lbs. 5.65 • —
bbls., mines .....100 lbs. 7.00 • —
flour, light, bgs., mines 100 lbs. 5.25 • —
bbls., mines .....100 lbs. 6.25 • —
lump, bgs., mines .....100 lbs. 4.95 • —
rolls, bgs., mines.....100 lbs. 5.50 • —
bbls., mines .....100 lbs. 6.25 • —
salt block, bgs., mines ..100 lbs. 4.65 • —
virgin block, bbls. mines 100 lbs 4 70 —
Sulfur, rubbermakers, coml., reg., bgs., mines 100 lbs 2.45 • —
bbls. mines .... 100 lbs. 3 70 • —
98-100%, passing through 325 mesh bgs. mines 100 lbs 2.55 • —
bbls., mines .... 100 lbs 3.80 • —
refd., bgs., mines .....100 lbs. 4.90 • —
bbls., mines .....100 lbs. 6.05 • —
treated, 2.5% mineral oil, bgs., mines 100 lbs 2.75 • —
bbls., mines 100 lbs 4.00 • —
Sulfur dichloride, ret. dms. c.l., works frt equald lb 04½ • —
ret dms. l.c.l. same basis lb. 05¼ —
tanks same basis lb. .04 —
Sulfur dioxide, liq. coml., cyls., works frt equald lb .10 .12
multi-unit cars works lb .0535 • —
tanks works lb. .045 —
Sulfur dioxide, refrigeration, cyls., dlvd. lb. .33 • —
Sulfur monochloride 55-gal non-ret. dms. c.l. frt equald lb 04½ • —
dms., l.c.l., same basis ..... lb 05¼ • —
tanks, same basis ..... lb. .04 • —

SPECIFY PENOLA SOLVENTS for greater efficiency in processing and better end products.

- The Penola staff of experts is always glad to help with your solvents problems.
- Penola insists on modern production techniques to assure you of the highest quality solvents.
- Penola Solvents are backed by the nation's largest petroleum research laboratory and refining facilities . . . sold by one of the oldest marketers in the U. S.

The Penola name is your guarantee of . . .

• QUALITY • TECHNICAL ASSISTANCE
• PURITY • FAST DELIVERY

For information or ordering, just contact your nearest Penola office or write . . . Penola Oil Company, 15 W. 51st St., New York 19, N. Y.

PENOLA OIL COMPANY NEW YORK • DETROIT • CHICAGO

Penola

Sulfuric Acid—Watchung-Type Reds

Sulfuric acid 60° Be. cbys., c.l., works 100 lbs 2.00 - —
cbys., l.c.l., works 100 lbs 2.30 - —
tanks works ton 18.60 - —
66 Be cbys c.l. works 100 lbs 2.25 - —
cbys., l.c.l., works 100 lbs 2.55 - 3.35
tanks works ton 22.35 - —
Sulfuric acid, 98%, tanks, works ton 23.50 - —
99% tanks works ton 23.70 - —
100% tanks works ton 23.95 - —
CP, NF, consumers' cbys., c.l. frt equald lb 12¾ —
consumers' cbys., l.c.l., same basis lb. .14¼ - .14¾
5-pt bots, extra cs., c.l. works, frt alld lb 16¼ —
5-pt bots, extra cs, l.c.l. same basis lb 17¾ - —
Sulfuric acid, fuming (oleum) 20% tanks, works ton 25.00 - —
40% tanks, works ton 29.00 - —
65% tanks, works ton 39.50 - —
Superphosphate, run-of-pile, under 22% a.p.a., pulv bulk, c.l. Baltimore unit ton .90 .93
bulk c.l. Carteret, N.J. unit-ton .90 - .93
bulk f.o.b. vessel unit ton 1.02 - —
Superphosphate, triple, 48% or more a.p.a., pulv bulk, c.l. East Tampa, Fla unit ton .98 - —
Sweet birch oil, USP, northern, cns lb 4.00 - 9.50
USP, southern, cns lb 2.00 - 3.05

T

2,4,5-T, dms, c.l. works, frt equald lb 1.18 - —
dms, l.c.l. same basis lb 1.25 - —
2,4,5-T isopropyl ester, dms., c.l. works, frt equald lb 1.24 - —
dms, l.c.l. works lb 1.29 - —
Talc, dom., fibrous New York, grd, bgs, c.l. works ton 25.00 —
bgs, l.c.l., works ton 31.00 - 36.00
fibrous, New York, 99.5%, 325 mesh, bgs, c.l. works ton 31.00 - —
bgs, l.c.l. works ton 34.00 - —
fibrous, 99.95%, 400 mesh, micronized, bgs, c.l. works ton 38.00 - —
625 mesh micronized, bgs, c.l. works ton 80.00 - —
ord., Calif., gran, bgs, c.l. works ton 34.00 - 39.50
Vermont, off-color, grd, bgs, c.l., works ton 19.40 - —
bgs, l.c.l. works ton 37.00 - —
Imp. Canadian, grd, bgs, c.l. mines ton 28.00 - 35.00
Tall oil, crude, dms., c.l., works lb. .04¼ - .04½
tanks, works lb. .02¾ - .02⅞
Dist, dms, c.l. works lb .07¾ —
dms, l.c.l., works lb .08 .08½
tanks, works lb. .05¾ - .06¼
Refd., dms., c.l., works lb. .07½ —
dms., l.c.l., works lb. .07¾ - .08
tanks, works lb. .05½ - .06¼
Tall oil acids, dms., c.l., works lb. .08¼ .11¾
dms., l.c.l. lb. .08¾ - .12¼
tanks, works lb. .06½ - .09¾
Tallow, edible, tanks, dlvd lb. .08¾ - .08⅞
inedible, fancy, bleachable, tanks, lb. .06½ - —
fancy, guaranteed, dms., t.a.s. lb. .09¼ Nom.
No. 1, tanks, dlvd. lb. .05⅜ - .05¼
prime, tanks, dlvd. lb. .05⅜ - .05¼
special, tanks, dlvd lb. .05⅜ - .05¾
sulfonated 25% bbls, l.c.l lb 06⅜ - 08⅜
50% bbls, l.c.l lb 10½ 11
Tallow acids, dist, dms lb. .14¼ .16¾
tanks lb. .11¾ —
Hydrogenated, dms lb .15¾ 18¼
Tallow oil acidless, cms, c.l. lb. .13½ Nom
dms, l.c.l lb. .14½ 16
Tangerine oil, Florida, dms lb 3.10 4.00
Tankage, animal, feeding, 9-11% ammonia, New York, bulk unit-ton 5.00 - —
Animal, feeding, 9-11% ammonia, Chicago, bulk unit-ton 5.75 - —
Tannic acid, NF, fluffy, bbls, 1,000 lb lots lb 2.05 - —
bbls., smaller lots lb 2.06 2.07
NF, powd., bbls., 1,000-lb. lots lb 1.95 - —
bbls, smaller lots lb 1.96 1.99
Tech, dms lb 1.05 - —
Tansy oil, dms lb 7.25 - 7.50
Tar acid oil, 15-18%, dms., c.l., frt equald gal .52½ —
dms, l.c.l., same basis gal .55½ - —
tanks, same basis gal .43½ - —
25-28%, dms, c.l. same basis gal 60 - —
dms, l.c.l. same basis gal 62 - —
tanks, same basis gal 50 - —
50-53%, dms., c.l., same basis gal. 75 - —
dms., l.c.l. same basis gal 77 - —
tanks, same basis gal. 65 - —
Tar, coal (see Coaltar)
Tartar emetic (see Antimony potassium tartrate)
Tartaric acid, NF, 100-lb bgs., c.l., frt equald lb. .41 - —
bgs., 10,000 lbs., 1 shipt., same basis lb. .43 - —
bgs, smaller lots, same basis lb. .47 - —
Terpine hydrate, NF, cryst, powd., 100-lb fib dms lb 70 - —
Terpineol, extra, dms lb .50 - .60
Prime, dms lb. .40 .50
Terpinyl acetate, extra, cns, dms, lb .64 .75
Prime, dms lb .53 .56
Terpinyl propionate, dms lb 1.75 3.00
Terra alba (see Gypsum).
Testosterone, USP, bots gram No prices.
Testosterone proprionate, USP, bots, gram No prices.
Tetrachloroethane, dms, works lb 14½ —
Tetrasodium pyrophosphate (see Sodium pyrophosphate)
Tetrachloroethylene, tech (see Perchloroethylene)
Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l. works lb. .20½ - —
dms, l.c.l. works lb .22 .23½
Tetraethyl orthosilicate, dms., c.l., dlvd E lb. .60 - —
dms, l.c.l., dlvd, E lb. .61½ - —
Tetraethyl pyrophosphate, 40%, cns., dms, frt equald lb .75 - —
Tetraethylenepentamine, dms., c.l., dlvd E lb. .52½ - —
dms., l.c.l., dlvd E, lb. .53 - —
tanks, dlvd E lb. .51 - —
Tetraethylthiuram disulfide, tech., dms, frt alld lb 1.04 - —
Tetrahydrofuran, dms, c.l., t.l., works lb .36½ - —
dms., l.c.l., or t.l.l., works lb. .37 - —
tanks, works lb. .35 - —
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn. lb .31½ - —
dms., l.c.l., Memphis, Tenn lb .32½ - —
dms., c.l., t.l., Newark, N.J lb .33½ - —
dms., l.c.l., Newark, N.J lb .34½ - —
tanks, dlvd E of Denver lb 31 - —
tanks, dlvd W of Denver lb. .32 - —

Tetrapotassium phosphate (see potassium phosphate).
Thallium metal, dlvd. lb. 7.50 - 10.00
Thallium sulfate, 99% bots., dlvd. lb. 9.00 - 10.00
Theobromine, NF, fib. dms lb 4.50 - —
Theobromine and sodium acetate, USP, fib dms lb 4.75 - —
Theobromine sodio-salicylate, NF, fib dms lb 3.90 - —
Theophylline, USP, anhyd., 100-lb. dms., frt. alld lb. 3.65 - —
Thiamine hydrochloride, USP, fib. dms., frt. alld kilo. 36.00 - —
USP, ampule grade, fib. dms., frt alld kilo. 38.00 - —
Thiamine mononitrate, USP, fib dms., frt alld kilo. 36.00 - —
Thiocarbanilide, dms, ton lots lb 72 - —
dms., less ton lots lb 74 - —
Thiodiphenylamine (see Phenothiazine).
Thioflavin green toner, brilliant, molybdated, PMA, bgs., works lb 5.20 - —
Tungstated, PTMA, bgs., works lb 6.20 - —
Thioglycolic acid, refd., chys., 105% basis lb 1.35 - 1.55
Thiosalicylic acid, purif., dms., 1,000-lb., lots, works lb 4.00 - —
Thiourea, tech., bgs, t.l. frt alld. lb. .30 - —
bgs., ton lots, same basis lb .32 - —
bgs., less than ton lots, same basis lb .33 - —
Thorium nitrate, purif., fib dms., 100-lb lots or more, works lb 3.50 - —
dl-Threonine, bots., 1-kilo lots kilo 275.00 - —
Thyme leaves, French, bgs lb 29 - —
Spanish, bgs. lb 14 - —
Thyme oil, NF, red, cns., dms lb. 1.90 - 2.25
Tech, white cns lb 40 1.85
USP, white, cns lb 2.20 2.60
Thymol, fib dms lb 2.60 3.00
Thymol iodide, NF dms lb 7.30 —
Timbo, root (see Cube root).
Tin chloride (see Stannous chloride, anhyd.)
Tin crystals (see Stannous chloride, hydrous)
Tin metal (Straits) lb. 1.01 - —
Tin oxide (see Stannic oxide)
Tin sulfate (see Stannous sulfate).
Tin tetrachloride, annyd (see Stannic chloride, anhyd.)
Titanium dioxide, anatase ceramic, bgs., c.l., dlvd lb .25½ —
bgs., l.c.l., dlvd lb .26½ —
reg., bgs., c.l., dlvd lb. 25½ —
bgs, l.c.l, dlvd lb 26½ —
metallurgical, nat., bgs., c.l., f.o.b Jacksonville, Fla ton 180.00 - —
bgs., 5-ton lots, Niagara Falls, N.Y. ton 205.00 - —
bgs, ton lots, same basis ton 215.00 - —
Milled metallurgical titanium dioxide $7.50 per ton higher
Titanium dioxide, rutile, non-chalking, bgs, c.l., dlvd, E lb. .27½ —
bgs, l.c.l., dlvd, E lb. 28½ —
Titanium dioxide-calcium pigment, 30% Ti O_2, reg., bgs., c.l., dlvd lb. .09⅜ —
bgs, l.c.l., works lb. .09¾ —
50% Ti O_2, high tinting, dms, c.l. lb. .14⅜ —
dms, l.c.l lb. .14⅞ —
Titanium hydride, powder, dms., works lb 8.10 9.00
Titanium tetrachloride, tech., dms., c.l., works lb. 25 - —
dms., l.c.l., works lb. .27½ - .29
tanks, works lb .20 - —
Tobias acid, dms, c.l. t.l. lb .78 - —
dms., l.c.l. lb .81 - —
d-a-Tocopherols, NF, mixer, conc., pure basis, bots kilo 67.00 - —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo 122.00 - —
d-a-Tocopheryl acid succinate, cryst., bots kilo 109.00 - —
dl-a-Tocopherol, bots kilo 99.00 - —
d-a-Tocopheryl acetate, bots kilo 90.00 —
25% dry, powd, bots kilo 22.50 - 24.00
33⅓ dry powd, bots kilo. 30.00 - 31.50
o-Tolidine base, dry, kgs, 100% basis lb 1.55 - —
Paste, kgs, 100% basis lb 1.50 —

TOLUOL
Toluol quotations, both coaltar and petroleum, may be found under Toluene.

o-Toluidine, hydrochloride, paste, kgs, 100% basis lb 1.50 —
Tolu balsam, cns. lb. 2.80 - 3.10
Toluene, coaltar, industr, or nitration, tanks, dlvd E of Rockies gal .25 - —
Toluene, petroleum, in drums, c.l., dlvd E of Rockies gal. 25 - .32
p-Toluenesulfonamide, powd, dms., t.l., works lb .40 - —
dms, l.t.l., same basis lb. .43 - —
Toluenesulfonic acid, dms., c.l., t.l. works lb. .17 - —
dms, l.c.l. works lb. .18 - —
p-Toluenesulfonic acid monohydrate, dms, c.l. or t.l. lb .90 - —
dms., 125 lbs. to t.l. lb 1.00 - —
m-Toluidine, dms., c.l., works, frt. alld lb .79 - —
dms., l.c.l., same basis lb .80 - —
tanks, same basis lb .78 - —
o-Toluidine, dms., c.l., works, frt. alld lb .30 - —
dms., l.c.l., same basis lb .31 - —
tanks, same basis lb .23 - —
p-Toluidine, tech., flake, dms., frt. alld lb .50 - —
Cast, dms, frt alld lb .45 - —
o-Toluidine-m-sulfonic acid, dms., works lb. .92 - 1.04
Toluidine red toner, deep shades, kgs, works lb 1.70 - —
Light shades, kgs, works lb 1.70 - —
2,4-Tolylenediamine, cryst., fib dms., l.c.l., frt alld lb 1.10 - —
Tonka beans, Angostura, cks. lb 1.50 1.60
Brazilian, Surinam, cs lb 1.25 1.30
Totaquine, 100-oz. lots, cns .... oz. .42 - —
Toxaphene, dms, c.l. t.l., works lb .22 - —
dms, l.c.l., t.l., works lb .28 - —
Trag canth gum, No. 1, ribbons, cs lb 3.60 - 3.75
No. 2, cs lb 3.40 - 3.60
No. 3, cs lb 3.15 - 3.25
USP powd., bbls. lb 1.05 - 1.15
Triacetin, dms, c.l., dlvd, E of Rockies lb .39 - —
dms., l.c.l., same basis lb .40 - —
tanks, same basis lb .37 - —
Triethylamine, dms., c.l., c.vd. lb .935 - —
dms., l.c.l., dlvd. lb. .935 - —
tanks, dlvd. lb. .96 - —

Tributyl citrate, tech., non-ret, dms., c.l., frt. alld. E. of Denver, lb. .42½ - —
non-ret, dms., l.c.l., frt. alld, E. of Denver lb. .43½ - —
tanks, frt. alld. E of Denver lb. .40 - —
Tributyl phosphate, dms, c.l., works, lb. .52½ - —
dms., l.c.l., same basis, lb. .53½ - —
tanks, same basis, lb. .50 - —
Tributylamine, dms., c.l., works lb. .67½ - —
dms., l.c.l., same basis lb. .69 - —
tanks, same basis, lb. .65 - —
Trichloroacetic acid, bots. lb. 2.00 - 2.50
Trichlorobenzene, dms., c.l., frt. alld. E lb. .15 - —
dms., l.c.l., frt. alld E. lb. .16 - —
tanks, frt. alld E lb. .13¼ - —
Trichlorobenzene prices 1c higher in the West.
1,1,1-Trichloroethane, dms., c.l., dlvd. lb. .13¼ - —
dms., l.c.l., dlvd. lb. .16¼ - —
tanks, dlvd, lb. .12¼ - —
1,1,2-Trichloroethane, dms., c.l., works lb. .13½ - —
dms., l.c.l., dlvd E. lb. .14¼ - —
tanks, works lb. .11½ - —
Trichloroethylene, dms., c.l., or t.l., works, frt. equald lb. .13 - —
dms., l.c.l., frt alld lb. .15 - .16¾
tanks works, frt equald lb .12 - —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate, 65% soln., rel. chys, works frt adjusted. lb. 1.40 - 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .35 - —
dms., l.c.l., dlvd. lb .36 - —
tanks, dlvd lb .32½ - —
Tricresyl phosphate, petroleum, dms., c.l., dlvd. lb. .34½ - —
dms., l.c.l., dlvd lb. .35½ - —
tanks, dlvd lb. .32½ - —
Tridecyl alcohol, mixed isomers, dms. c.l., dlvd E lb. .26½ - —
dms., l.c.l., dlvd E lb. .28 - —
tanks, dlvd E lb. .24 - —
Triethanolamine, dms, c.l. dlvd E, lb. .24½ - —
dms., l.c.l., same basis lb. .26 - —
tanks, same basis lb. .22 - —
Triethanolamine lauryl sulfate, dms., c.l., t.l., frt. alld lb. .25½ - —
dms., l.t.l., frt. alld. lb. .26½ - —
tanks, frt. alld lb. .24½ - —
Triethylamine, dms., c.l., dlvd E, lb. .50 - —
dms., l.c.l., same basis lb. .51½ - —
tanks, same basis lb. .47½ - —
Triethyl citrate, refd., tech., non-ret, dms., c.l., frt alld E, of Denver lb. .46¼ - —
non-ret, dms., l.c.l., frt alld, E of Denver lb. .47¼ - —
tanks, frt alld E of Denver lb. .43¾ - —
Triethyl phosphate, dms., c.l., dlvd, lb. .40½ - —
dms., l.c.l., dlvd. lb. .41½ - —
tanks, dlvd lb. .38 - —
Triethylene glycol, dms, c.l, dlvd, E lb. .21 - —
dms., l.c.l., dlvd, E. lb. .22½ - —
tanks, same basis lb. .18½ - —
Triethylenetetramine, dms., c.l., dlvd, E lb. .51½ - —
dms., l.c.l., dlvd E. lb. .53 - —
tanks, dlvd E. lb. .49 - —
Tri-isopropanolamine, dms., c.l., dlvd, E lb. .23¼ - —
dms., l.c.l., dlvd E. lb. .24¾ - —
tanks, dlvd E lb. .20¾ - —
Trimethylamine, anhyd., cyls., l.c.l., frt. equald, 100% basis lb. .30 - .305
tanks, same basis lb. .26 - —
basis lb. .26 - —
25-40% soln., dms., c.l., works, frt. equald, 100% basis lb. .35 - —
dms, l.c.l. works, frt equald., 100% basis lb. .35½ - —
tanks, works frt equald, 100% Trimethylolpropane, dms., c.l., t.l., dlvd, E lb. .35 - —
dms., l.c.l., l.t.l., same basis lb. .36 - —
Trinoxane, pure, dms, c.l., t.l., works, lb. .50 - —
dms, l.c.l., works lb. .51½ - —
Tripentaerythritol, c.l., t.l., dlvd, E, lb. .40 - —
bgs., l.c.l., l.t.l., dlvd E. lb. .41 - —
Triphenyl phosphate, bbls., c.l., frt equald lb. .41½ - —
bbls, l.c.l. frt equald lb. .42½ - —
Triphenylguanidine, bbls, works, lb. .90 - —
Tripropylene glycol, dms., c.l., t.l., frt alld E lb. .21 - —
dms., l.c.l., l.t.l., frt. alld, E lb. .22½ - —
tankcars and compartmented tankcars, frt alld E lb. .18½ - —
Tripropylene glycol, tankwagons and compartmented tankwagons, 1,000 gals min., frt alld E lb. .19 - —
Tripropylene glycol prices 1c per lb higher in West.
Trisodium phosphate (see Sodium phosphate tribasic)
di-Tryptophane, fib., dms., works, lb. 55.00 - —
Tung oil, dms., c.l., New York lb. .24 - —
dms., l.c.l., New York lb. .24½ - .25
tanks, New York lb. .22½ - —
tanks, domestic, mills lb. .22 - —
Tungsten metal, powd., 2.0-2.5 microns, dms, works lb 3.54 - —
Tungstic acid, tech., dms., 1,000-lb. lots, works lb. 2.25 - —
dms, smaller lots works lb 2.45 - —
Turkey red, bbls, works lb. .62 - —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine, oil, NF, cns., dms lb. .28 - .50
Tuscan red, bbls, frt equald lb. .26 - .32
Tyrothricin, USP, 1 to 5 kilos gram. .54 - —

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., dlvd, E of Rockies lb. .25 - .39½
Jobbing types, bbls., same basis lb. .19 - —
Regular types, dry bbls., same basis lb. .22½ - .35
Ultramarine blue prices 1c higher W of Rockies
Umber, pigment, burnt, American, bgs., c.l., works lb. .07½ - .07¾
bgs, l.c.l. works lb. .07¾ - .08
Turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N.Y. lb. .08¼ —
Umber, pigment, raw, American, bgs., works, lb. .07¾ - .08¼
Turkey type, bgs., works lb. .03½ - .08¾
Undecylenic acid, dms lb. 1.28 - —
Unicorn root, false (see Helonias root)
Unicorn root, true (see Aletris root).
Urea, 46% N, indust, bgs., c.l. t.l., dlvd E ton 125.00 - —
bgs., l.c.l. dlvd E ex whse. ton 145.00 - —
45% N, agricultural, bgs., c.l., (30 tons) dlvd, E ton 103.00 - —
Urea-ammonia liquor, A, B, C & F grades, N basis, tanks, frt. equald ton 120.00 - —
37 grade, tanks, same basis ton 145.00 - —

Urethane, USP, dms., t.l., f.o.b., works lb. .65 - —
dms., l.t.l., same basis lb. .70 - —
Uva-ursi leaves, bls. lb. .12 - —

V

Valerian root, Belgian, bgs. lb. .32 - —
Indian, bgs. lb. .25 - —
dl-Valine, dms., works lb. 21.00 - 27.50
Vanadium pentoxide, tech., dms., works lb. 1.26 - 1.33
Vandyke brown, bbls., works lb. .09¼ - .12
Vanilla beans, Bourbon, tins lb. 15.00 - —
Mexican cuts, tins lb. 15.00 - —
whole, tins lb. 15.50 - —
Vanillin, ex lignin, 100-lb fib. dms., 1,000-lb. lots or more lb. 3.00 - —
100-lb fib. dms., 500-lb. lots lb. 3.10 - —
100-lb. fib. dms., cns., 100-lb. lots lb. 3.25 - 3.35
Venetian red, jobbing, bgs., works, lb. .0475 - —
Venetian red, 20%, bgs., works lb. .0525 - —
25% bgs., works lb. .0575 - —
30% bgs., works lb. .06 - —
35% bgs., works lb. .0625 - —
40% bgs., works lb .0675 - —
Vetiver oil, Bourbon, cns lb. 16.00 - 16.50
Haitian, cns. lb. 14.00 - 15.50
Victoria blue toner, molybdated, PMA, 250-lb bbls., dlvd, E of Rockies lb 4.50 - —
Tungstated, PTA, 250-lb. bbls., dlvd, E. of Rockies lb. 5.55 - —
Victoria blue toner, bbls., prices 1c higher W of Rockies
Vinyl acetate monomer, zone 1, 55-gal dms., c.l., dlvd lb. .20 - —
55-gal dms., l.c.l., dlvd lb. .21½ - —
tanks, dlvd. lb. .17½ - —
tanktrucks less than 4,000 gal., dlvd lb. .18 - —
Zone 2, 55-gal. dms., c.l., dlvd lb. .21 - —
55-gal dms., l.c.l., dlvd. lb. .24 - —
tanks, dlvd. lb. .18½ - —
tanktrucks, less than 4,000 gals., dlvd lb. .19 - — -
Zone 1 is all continental US except zone 2, zone 2 comprises Ariz., Calif., Idaho, Mont., Nev., Ore., Utah and Wash
Vinyl n-butyl ether, tech., dms., l.c.l., works lb. .50 - —
Vinyl chloride monomer, tanks, works lb. .125 - —
Vinyl ether, USP, anesthesia, buts., 50cc., hospitals bot. 1.12 - —
bots., 75cc., hospitals bot. 1.56 - —
Vinyl ethyl ether, tech, dms., c.l., works lb. .29¼ - —
dms., l.c.l., works lb. .30 - —
tanks, works lb. .27¼ - —
Vinyl propionate monomer, dms., c.l. dlvd lb. .49 - —
dms., l.c.l. same basis lb. .50 - —
tanks, same basis lb. .47 - —
Vinyl trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms. to tanks, works lb. 1.20 - —
1 to 9 dms., works lb. 1.35 - —
tanks, works lb. 1.15 - —
Vinyltoluene, dms., c.l., f.o.b., works, lb. .16½ - —
dms., l.c.l., same basis lb. .18½ - —
tanks, f.o.b. dest. frt. prepaid lb. .14 - —
Viosterol, in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units .02½ - —
Virginia type red, bbls, works lb. 1.40 - —
Vitamin A acetate, syn., cryst., beads 500,000 A units per gram, 1,000,000 A units per gram, 1,000,000 units. .10 - —
Vitamin A acetate, liq., 1,000,000-1,800,000 A units per gram, 1,000,000 units, 1,000,000 A units per gram, 1,000,000 units. .10 - —
Vitamin B_1 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast).
Vitamin B_{12}, cryst., USP (cyanocobalamin), 1-50 grams, vials, tons gram. 120.00 - —
0.1% vitamin B_{12} USP, adsorbed on gelatin, 100 and 500-gram bots, on 1-5 kilo dms., gram. 1.43 - —
0.1% vitamin B_{12}, USP adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms gram. 1.43 - —
Vitamin B_{12}, oral grade solids, in containers of 1 and 10 gram of B_{12} activity, gram. 110.00 - —
0.1 percent trituration of cryst. B_{12} with dicalcium phosphate or mannitol, 1-10 kilo. 138.00 - —
Vitamin B_{12}, 0.1% cobalamin concentrate NF, adsorbed on resin, 500-gram bots., 1-5 kilo dms., frt. alld gram. 1.15 - —
0.1% cobalamin concentrate in gelatin, 1-10 kilo dms., frt. alld gram. 1.15 - —
Vitamin C (see Ascorbic acid)
Vitamin D (see Codliver and Fish-liver oils, Calciferol and Viosterol).
Vitamin D_2, dry, 850,000 units per gram, kilo lots kilo 42.50 - —
850,000 units per gram less than kilo lots kilo 45.00 - —
Vitamin E (see a-Tocopherol and Wheat germ oil)
Vitamin G (see Riboflavin).
Vitamin H (see Biotin)
Vitamin K, active (see Menadione).
Vitamin K_1, 25 gram bots gram. 4.50 —
Violet, methyl toner (see Methyl violet toner)
VM&P naphtha (see Naphtha, VM&P, petroleum).

W

Wahoo root bark, bls lb 2.25 - 2.50
Warfarin, 0.5%, dms., 50-lb. lots, dlvd lb 1.95 - —
dms, 25-49-lb lots, New York or Chicago lb 2.05 - —
dms, 5-24-lb lots, New York or Chicago lb 2.15 - —
Watchung-type reds, bbls lb 1.95 - —

WAXES
Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal dms...	gal.	12.25	—
White lead (see Lead white).			
White mineral oil (see Mineral oil, white).			
White pine bark, rossed, bls....	lb.	.21	.22
White precipitate USP, powd, dms.,	lb	6.55	—
Whiting (see Calcium carbonate)			
Wild cherry bark, thin, nat., bls.	lb.	.22	—
Thin, rossed, bls.	lb.	.22	Nom.
Wintergreen oil, USP, nat., northern, cns	lb	6.35	17.50
USP, nat., southern, cns.	lb	3.75	7.00
Wintergreen oil, syn. (see Methyl salicylate).			
Witch hazel bark, bls	lb	.16	.17
Witch hazel leaves, bls.	lb	.22	—
Wollastonite fine bgs., c.l., works	ton	39.50	—
bgs., l.c.l., ex whse.	ton	56.00	—
Medium, bgs. c.l., works	ton	27.00	—
bgs., l.c.l., ex whse	ton	44.00	—
Wood alcohol (see Methanol).			
Wood oil (see Tung oil)			
Woolfat, crude (see Degras).			
Woolfat, USP (see Lanolin).			
Wormseed Levant bgs	lb	2.50	—
Wormseed oil (see Chenopodium oil (NF).			
Wormwood oil, cns	lb	4.75	5.00

X

Xylene, coaltar, indust., tanks, works:			
Bethlehem, Pa.	gal.	.29	—
Birmingham dist.	gal.	.29	—
Chicago dist.	gal.	.28½	—
Cleveland dist.	gal.	.29	—
Geneva, Utah	gal.	.29	—
Johnstown, Pa.	gal.	.29	—
Lackawanna, N. Y.	gal.	.29½	—
Lone Star, Tex.	gal.	.27	—
Loram, Ohio	gal.	.29	—
Middletown, Ohio	gal.	.30	—
Minnequa, Col.	gal.	.29	—
Philadelphia dist.	gal.	.29	—
Pittsburgh dist.	gal.	.29	—
Sparrows Point, Md.	gal.	.29	—
Terre Haute, Ind.	gal.	.29	—
Youngstown, Ohio	gal.	.29	—
Xylene, petroleum, indust., tanks, f.o.b. works:			
Bayonne, N. J.	gal.	.29	—
Baytown, Tex.	gal.	.27	—
Charleston, S. C.	gal.	.29	—
Chicago, Ill.	gal.	.28½	—
Detroit, Mich.	gal.	.29	—
Houston, Tex.	gal.	.27	—
Philadelphia, Pa.	gal.	.29	—
Providence, R. I.	gal.	.30	—
Sewell's Point, Va.	gal.	.28	—
Wood River, Ill.	gal.	.28½	—
Xylenol, cryst., 45°-47° C., m.p., dms., l.c.l., works	lb.	.23	—
56°-58° C., m.p., dms., l.c.l., works, frt. equald	lb.	.33	—
60°-62° C., m.p., dms., l.c.l., same basis	lb.	.40	—
Xylenol fraction, b.r. 7°-9° C., dry above 227° C., dms., c.l., same basis	gal	1.25	—
dms., l.c.l., same basis	gal	1.30	—
tanks, same basis	gal	1.05	—
b.r. 7°-9° C., dry at or below 227° C., dms., c.l., same basis.	gal.	1.35	—
dms., l.c.l., same basis	gal.	1.40	—
tanks, same basis	gal.	1.15	—
2,4-Xylidine, tech., dms., frt. alld.	lb.	1.15	—
2,5-Xylidine, tech., dms., frt. alld.	lb.	1.20	—
Xylidines, mixed, o-m-p, dms., c.l., or t.l., works	lb.	.39	—
dms., l.c.l., same basis	lb.	.40	—
tanks, same basis	lb	.38	—

XYLOL

Xylol quotations, both coaltar and petroleum, may be found under Xylene.

Y

Yara yara oil, cns.	lb.	2.15	3.05
Yeast, brewers, debittered, USP, Saccharomyces, dlvd	lb.	.27	—
Yeast, brewers, dry, USP, 50 Int'l B units per gram, 100-lb. dms.	lb.	.47	—
USP, 90 Int'l B units per gram, 100-lb. dms	lb.	.52	—
USP, 200 Int'l B units per gram, 100-lb. dms.	lb.	.56	—
USP, 300 Int'l B units per gram, 100-lb. dms.	lb.	.60	—
Torula, USP, dlvd	lb.	.18	—

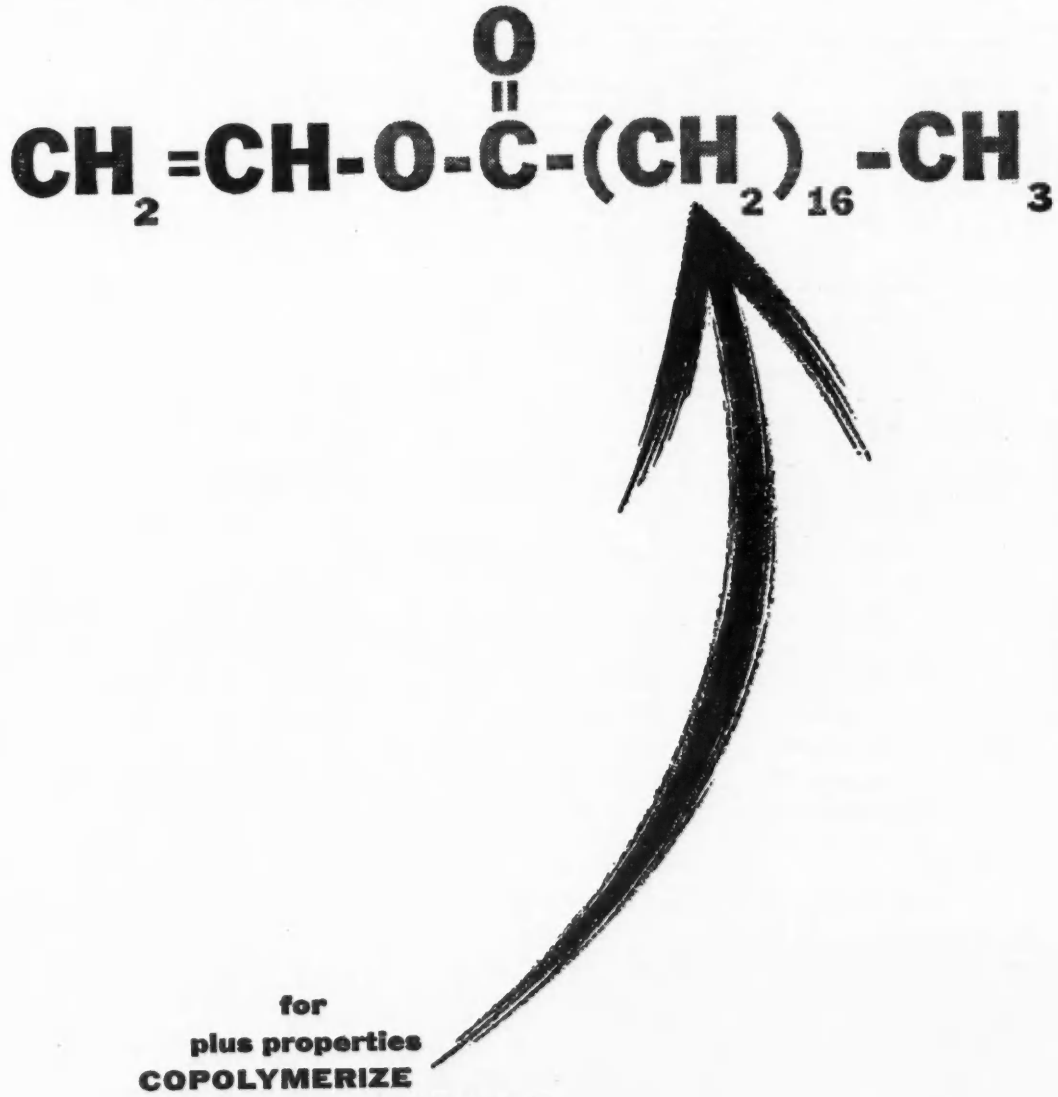
YELLOW PIGMENTS

Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow.

Yerba santa leaves, bls.	lb.	.40	.45
Ylang-ylang oil, Bourbon, bots	lb.	7.00	22.00
extra, bots.	lb.	28.00	33.00
Yohimbine hydrochloride, bots., tins.	oz.	3.75	4.25

Z

Zein, bgs., 36,000-lb. lots or more, bgs., 500-lb. lots or more, dlvd.	lb.	.343	—
bgs. smaller lots, dlvd	lb.	.373	—
Zinc acetate, NF, VIII, dms.	lb.	.53	—
Tech, dms, l.c.l., works	lb.	.29¼	—
Zinc borate, bgs., 1,000 lbs or more, works	lb.	.23	—
bgs., less than 1,000 lbs. same basis	lb.	.25	—
Zinc chloride, NF, gran., dms	lb.	.42	—
NF, precip., powd., dms	lb.	.26	—
Tech, soln., 50%, dms, c.l., works, 100 lbs.		5.80	—
dms., l.c.l., works	100 lbs.	6.40	—
tanks, works	100 lbs.	5.15	—
fused, dms., c.l., works 100 lbs.		10.70	—
dms, l.c.l, works	100 lbs.	11.20	—
gran., fib, dms., c.l., works, 100 lbs.		11.45	—
fib dms, l.c.l, works	100 lbs.	11.95	—
Zinc chromate, bbls., dlvd.	lb.	.29	—
Basic, bbls., dlvd.	lb.	.34	—
Zinc cyanide, dms., 1,000-lb. lots or more, works	lb.	.55	—
dms., smaller lots, works	lb.	.57	—
Zinc dust, coml., bbls., c.l., works,	lb.	.1460	—
Pigment, bbls., c.l., works	lb.	.16½	—
bbls., l.c.l., works	lb.	.17	—
Zinc fluoride, bbls., works	lb.	.49	.50
Zinc hydrosulfite, dms., c.l., frt. alld	lb.	.21½	—
dms., l.c.l., frt. alld.	lb.	.23½	—
Zinc metal, prime western, slabs, E. St. Louis	lb.	.13	—
Prime western, slabs, New York,	lb.	.13½	—
Zinc naphthenate, liq., 8% Zn., dms., frt. alld	lb.	.27	—
10% Zn., dms., frt. alld	lb.	.33	—
Zinc nitrate, tech., cryst., bbls., works	lb.	.20	—
Zinc oxide pigment, American process, lead-free, bgs., c.l., frt. alld	lb.	.14½	—
bgs., l.c.l., 10 tons or more, same basis	lb.	.15	—
bgs., l.c.l., smaller lots, same basis	lb.	.15½	—
leaded, 35%, bgs. c.l., mills, frt. alld	lb.	.15⅝	—
bgs., l.c.l. 10 tons or more, same basis	lb.	.15⅞	—
leaded, 50% bgs., c.l., same basis	lb.	.15¾	—
bgs., l.c.l., 10 tons or more, same basis	lb.	.16¼	—
bgs., l.c.l. smaller lots, same basis	lb.	.16⅜	—
Zinc oxide pigment, French process, green seal, bgs., c.l., mills, frt. alld	lb.	.16¼	—
bgs., l.c.l., 10 tons or more, same basis	lb.	.16¾	—
bgs., l.c.l., smaller lots, same basis	lb.	.17¼	—
red seal, bgs. c.l. same basis,	lb.	.15¾	—
bgs., l.c.l., 10 tons or more, same basis	lb.	.16¼	—
bgs., l.c.l., smaller lots, same basis	lb.	.16¾	—
white seal, bgs., c.l., same basis	lb.	.16¾	—
bgs., l.c.l., 10 tons or more, same basis	lb.	.17¼	—
bgs., l.c.l., smaller lots, same basis	lb.	.17¾	—
Zinc oxide, USP, dms., c.l. frt. alld.	lb.	.18¼	—
dms., l.c.l., 10 tons or more, same basis	lb.	.18¾	—
dms., l.c.l., smaller lots, same basis	lb.	.19¼	—
Zinc phenolsulfonate, NF, gran., dms	lb.	.43	.48
NF, powd., dms	lb.	.48	.49
Zinc resinate, precip., 7.2-7.6% Zn., dms., frt. alld	lb.	.36¼	—
Zinc silicofluoride, dms., works	lb.	.12½	.14
Zinc stearate, tech., USP, ctns., c.l.,	lb.	.41	—
ctns., l.c.l.	lb.	.42	.46
Zinc sulfate, powd., monohydrate, 36% Zn., bgs., c.l., dlvd. E 100 lbs.		8.75	—
bgs., l.c.l., dlvd. E 100 lbs.		9.75	—
USP, gran., dms.	lb.	.26	—
Zinc sulfate in bbls. 40c. higher.			
Zinc sulfide pure, bgs., c.l., dlvd	lb.	.2530	—
Zinc undecylenate, dms.	lb.	2.00	—
Zinc yellow (see Zinc chromate).			
Zinc-ammonium chloride, bgs., c.l., works 100 lbs.		10.25	—
bbls, c.l., works	100 lbs.	10.85	—
bbls., l.c.l., works	100 lbs.	11.35	—
Zinc-formaldenyde sulfoxylate, basic, 300-lb. dms., frt. alld	lb.	.36	—
Normal, 250-lb. dms., frt. alld	lb.	.52	—
Zircon (G), gran., bgs., c.l., works,	lb.	.03¼	—
bgs., 5 tons to c.l., works	lb.	.03⅜	—
bgs., 1 ton to 9,999-lb lots, works,	lb.	.04	—
bgs., smaller lots, works	lb.	.06½	—
Zircon (G), milled, bgs., c.l., works,	lb.	.04½	—
bgs., 5 tons to c.l., works	lb	04⅝	—
bgs., 1 ton to 9,999 lb lots, works	lb	04⅝	—
bgs. 500-1,999-lb lots works	lb	07½	—
Zircon (G) in barrels 1c higher.			
Zirconium acetate, soln 13% ZrO_2, dms., c.l., 30,000 lbs. min., works	lb	23	—
Zirconium hydride, powd, electronic grade, dms., works	lb	14.00	15.00
Zirconium oxide, CP, white, grd., bbls or bgs. works	lb	1.50	—
Electric-fused, lump, bgs., 500 to 1,999-lb. lots, works	lb.		.48½
bgs., smaller lots, works	lb.	.51	—
milled, bgs., c.l. works	lb.	.62	—
bgs., 5-ton lots, works	lb.	.62½	—
bgs., 1-ton to 9,999-lb. lots, works	lb.	.63½	—
bgs., 500 to 1,999-lb. lots., works	lb.	.64	—
bgs., smaller lots, works	lb.	.66	—
Glass polishing grade, 94-97% ZrO_2, bgs., works	lb.	.55	.65
Opacifier grade, 85-90% ZrO_2, bgs.,	lb.	.27	.50
Stabilized oxide, 91% ZrO_2, milled, bgs	lb.	.62	.83
Zirconium oxychloride, cryst., ctns., 5-ton lots, works	lb.	.37½	—



for
plus properties
COPOLYMERIZE
with VINYL STEARATE

Vinyl Stearate's long chain length gives greater dissymmetry and lateral bulk to resulting copolymer chains. Using a very low concentration of Vinyl Stearate, you can build a copolymer that offers a high degree of flexibility. Using Vinyl Stearate, you can also impart water resistance to otherwise water-sensitive copolymers. We think you'll find Airco's complete product data sheet on this new internal plasticizer pretty interesting. Send today.

AT THE FRONTIERS OF PROGRESS YOU'LL FIND...

AIRCO

AIR REDUCTION CHEMICAL COMPANY

A division of Air Reduction Company, Incorporated
150 East 42nd Street, New York 17, N. Y., Phone MUrray Hill 2-6700
Represented Internationally by Airco Company International

COLUMBIA-SOUTHERN®

MURIATIC ACID
(HYDROCHLORIC ACID)
20°–22° BAUME
8,000 Gallon and 10,000 Gallon
Rubber-lined Tank Cars

COLUMBIA-SOUTHERN CHEMICAL CORPORATION
SUBSIDIARY OF PITTSBURGH PLATE GLASS COMPANY
ONE GATEWAY CENTER · PITTSBURGH 22 · PENNSYLVANIA

DISTRICT OFFICES: Boston • Charlotte • Chicago • Cincinnati Cleveland • Dallas • Houston Minneapolis • New Orleans New York • Philadelphia • Pittsburgh • St. Louis • San Francisco

FAIRMOUNT CHEMICAL CO., INC.
117 BLANCHARD ST., NEWARK 5, N.J.

HYDRAZINE

Are We
Outsmarting Ourselves?

In these weekly epistles we seem to have sold ourselves as the "can do" boys of the Chromic Acid business.

Which (modestly) is pretty true.

If you run fresh out of Chromic Acid, we can probably move faster and surer than anyone else. And deliver a top-quality 99.7+% product to boot. And be happy to oblige.

But — for the record —

We aren't adverse to a reasonable backlog of firm orders for BFC Chromic Acid that don't have to be shipped yesterday. They'll get good attention, too. And be easier on our id . . . and yours.

How about a share of your second-quarter requirements?

PAINTS · PLASTICS · CHEMICALS

BETTER FINISHES & COATINGS, INC.
268 Doremus Avenue
Newark 5, N. J.
2014 East 15th St.
Los Angeles 21, Calif.

Heavy Chemicals

Downtrend of mercury prices continued as sellers trimmed tabs $2 per flask. Tin dropped 1 cent per pound as demand continued to lag. Tin salts declined ½ to ⅜ cent per pound. Major tin consumers, it was said, have taken to the sidelines and won't be back in the market with substantial orders until settlement of the steel strike. Lead sales persisted at low ebb reflecting the long inventory position of consumers who had stocked up against an anticipated price advance.

Acid market improved perceptibly and further improvement was looked for as steel output took a long stride toward pre-strike levels. Affected by Pittsburgh's resurgence were hydrochloric and sulfuric acids.

Caustic soda and chlorine, two materials on a select slate of steel-strike-proof blue chips, are riding the crest of a lonely boom and aren't looked for to subside until year's end, when consumers turn of the intake pipes to make an inventory count. The two moved along swimmingly last week.

Advances in copper chemicals, reported in this space a week ago, became industrywide last week as conviction spread that the advance in copper would stick. Affected were copper chloride, up ½ cent to 1.05 cents, depending upon specification, and copper sulfate, up 40 cents to $1.40 per hundredweight.

Other price action last week affected fluorborates, a group of specialty chemicals used for manufacture of printed circuits by the electronics industry. Prices were raised 2 cents to 7 cents per pound.

The American Paper and Pulp Association reported production for the week ended November 14 at 94.1 percent of theoretical capacity as compared with the revised figure of 95.6 percent for the previous week and 91.2 percent for the corresponding week of last year.

Price Trends

Advanced
None

Reduced
Mercury, $2 per flk.
Tin salts, ½-⅜c. per lb.
Tin straits, 1c. per lb.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Nov. 21, 1958
106.82	106.87	107.01	103.53

For Current Prices see page 10

Acids

The following preliminary figures, compiled by the Bureau of Census, report production of specified acids in tons.

	September	August
Hydrochloric	89.175	89.897
Nitric	261.343	241.845
Phosphoric	153.370	154.062
Sulfuric (gross)	1.332.794	1.310.875

Hydrochloric—At week's end market conditions started to look up with resumption of sales to the steel industry. Other outlets, such as chlorinated solvents, continued to place seasonally high orders.

Hydrofluoric—Market has been seasonally active all through the current quarter. Helping it along, according to trade sources, has been the labor truce prevailing in the aluminum industry, a major HF outlet.

Nitric—Industrial accounts, which had slackened under the weight of the steel strike are starting to perk-up, trade sources reported last week.

Sulfuric—The American Iron & Steel Institute has estimated steel output for the week just ended at 2,233,000 net tons, or 78.9 percent of capacity, in contrast to an actual total of 1,291,000 tons, or 45.6 percent of capacity for the preceding week.

Bases and Salts

The following preliminary figures, compiled by the Bureau of Census, report production of specified chemicals in tons:

	September	August
Calcium carbide	79.024	81.392
Caustic soda, all processes	397.465	398.723
Chlorine gas	364.331	363.980
Soda ash, syn.	406.541	423.843
Nat.	63.229	57.900

Caustic Soda—Business continued last week to move along well, sparked by brisk activity in textile outlets. Prices were steady, and supply adequate to meet all trade needs.

Copper Chloride—The material was advanced two weeks ago to reflect higher copper. Dihydrate is up ½c., anhydrous up ¾c., and dry crystals up ½c. New carlot prices are respectively, 30c. per pound, 44¾c. and 38¾c.

Cuprous chloride was raised 1.05c. across the board to 41.35 for truckloads. Differentials for smaller quantities remain unchanged.

Copper Sulfate—In line with recent advances, industrywide prices now stand at $12.75 to $13.00 for crystalline copper sulfate in carlots, up 40c. per hundredweight; $24 for nonhydrated, same basis, up 90c., and $29.60 for tribasic, up $1.40 per hundredweight.

Made effective two weeks ago, the higher listings reflect the strong price position of copper and metal.

Fluoroborates—Prices were raised, effective November 12, as follows: lead fluoroborate up 2c. to 20½c., copper fluoroborate up 2c. to 33c., tin fluoroborate up 7c. to 86c., in truckloads, standard differentials unchanged for smaller quantities.

A group of specialty chemicals, fluoroborates are used in manufacture of printed circuits for the electronics industry.

Nonferrous Metals

Aluminum—Domestic output of primary aluminum in September: 168,206 tons, a decline of three percent from August, according to the Mines Bureau. Shipments decreased slightly but sufficiently to carry them to the lowest level since February, the Bureau said.

For the third quarter, the Bureau reported 520,000 tons of primary production, which exceeded first quarter output by 64,000 tons and that of the second quarter by 34,000 tons.

In comparison with the first nine months of 1958, the comparable period of 1959 brought 1,463,000 tons of output, an increase of 29 percent, and shipments of 1,500,000 short tons, an increase of 27 percent, the Bureau said.

Under authority of the expansion goal contracts, two major companies shipped a total of 14,205 tons of aluminum to the Government during the third quarter of 1959. Overall total of such shipments, through September, according to the Bureau, was 48,154 tons.

Primary metal stocks totaled 109,000 tons at producers' plants on September 30, up 36 percent from the 80,000 tons held at the end of July.

As to foreign trade, the Bureau reported general net imports of crude aluminum and plates, sheets, bars, etc. in August at 25,381 tons, a decline of 15 percent from July. Receipts of aluminum from Canada accounted for 70 percent of total gross imports, the Bureau said.

From Business & Defense Services Administration comes the following information on aluminum scrap exports:

- September exports hit 7,106,000 pounds, largest monthly total reported for the year, bringing third quarter total to 17,035,000 pounds.
- Exports during the first nine months touched 39,870,000 pounds, up 40 percent from the corresponding period of 1958.

BDSA argued that despite the recorded increase in exports, the balance between domestic supply and demand has not been adversely affected. But in view of concern expressed by the secondary smelting industry, the agency is keeping a close watch over the domestic supply-demand situation and export trends.

Chromium—Domestic consumption of chromite fell 17 percent in September, Bureau of Mines said last week. Consumption in metallurgical uses dropped 23 percent while refractory and chemical consumption gained four and five percent, respectively, according to the Bureau.

In production off 14,687 tons of chromium ferroalloys and metal, 40,849 tons of chromite were consumed, the Bureau said. Only 33 tons went directly to steel, due of course to the steel strike. Of the 40,849 tons, 33,266 were metallurgical ore, 1,900 tons chemical grade, and 5,683 tons refractory grade ore.

Refractory outlets took 15,569 tons of chromite during the month, and furnace repairs 209 tons. In production of 9,806 tons of chemical, sodium bichromate

equivalent, 12,793 tons of chromite were consumed.

Other items from the Bureau's report:

• Domestic shipments of concentrate in September at 8,255 short dry tons, all from the state of Montana.

• Stocks of chemicals at producers plants on September 30 at 17,507 short tons, sodium bichromate equivalent.

Lead—According to the Mines Bureau, US mines produced 20,300 tons of recoverable read in September, down six percent from August, down 850 tons from the year's monthly average to date.

The following data were released by the American Bureau of Metal Statistics:

• Import tonnage for the first nine months of the year down 29 percent to 319,918 from 447,918 in like '58 period. September imports at 33,084 tons, down sharply from 53,771 in same month of '58. (Don't take this decline too seriously, say observers, who note that bulky tonnage last September got its beef from consumers' rush to beat October 1 price rise.)

• With the close of September, refiners and smelters hold 109,527 tons of stocks, against 116,344 a month earlier.

Buying interest continued to lag last week. A highly reliable source reported last week's sales at 2,444 short tons, hardly better than the record low average of September and October.

Price was maintained at 13c. per pound, New York.

Mercury—Downtrend of prices continued, as sellers shaved $2 off listings. Large lots were offered last week at a range of $216 to $218 per flask, spot or immediate shipment.

Silver—Price steady at 91⅜c. per pound, a long-standing listing.

Tin—Major consumers remained on the sidelines, and it appeared to observers that they would not be back in the market with substantial orders until settlement of the steel strike. The current injunction period is not expected to bring much relief to starved-for-business tin producers, these observers said.

Price last week closed at $1.01 per pound, spot.

James M. Gillet Retires: With Victor for 36 Years

James M. Gillet, assistant to the president of Victor Chemical Works, Chicago, has retired after thirty-six years with the company.

Mr. Gillet joined Victor in 1923 in the technical service department. He remained in that department handling many special assignments until the outbreak of World War II. During the war, he served as Victor's representative in contacting the War Production Board on allocations.

During the past few years, Mr. Gillet handled all arrangements regarding litigation in Florida, Tennessee and Montana. Earlier this year, he was instrumental in organizing Victor's case for the jury trial held in US District Court of Columbia, Tenn., in which the jury awarded a verdict in favor of Victor in the nine-year old fluorine damage suit.

Mr. Gillet, active in many chemical technical organizations, was a charter member of the air pollution abatement committee and chemicals in foods committee of the Manufacturing Chemists' Association.

Naftone Elects Vice-President

Naftone, Inc., has elected Carl Teiwes a vice-president. Mr. Teiwes, secretary of the firm, joined Naftone in 1955. Prior to that he was with William S. Gray & Co. for over twenty-five years.

Cowles
DETERGENT SILICATES
for compounding

Laundry products
Metal cleaners
Dairy cleaners
Dish washing compounds
General purpose cleaners
Soap builders
Paint cleaners
Paper de-inking compounds
Household cleaners
Floor cleaners

★ **CRYSTAMET***—The new form of Sodium Metasilicate—Pentahydrate

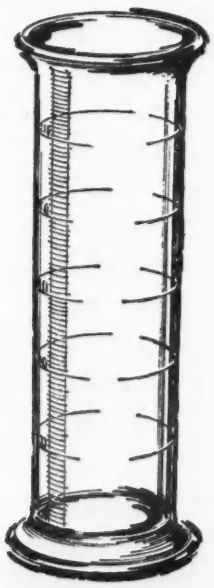
★ **DRYMET***—The original anhydrous Sodium Metasilicate

★ **DRYORTH***—Sodium Orthosilicate. Technically anhydrous

STOCKS IN PRINCIPAL CITIES

*Reg. U.S.Pat. Off.

Cowles CHEMICAL COMPANY
7018 Euclid Ave. • Cleveland 3, Ohio



HOW DO YOU MEASURE THE MERITS OF CAUSTIC SODA?

Make sure the caustic you buy measures up to your particular needs. Wyandotte offers you:

- many uniform grades of highest purity
- expert technical service
- prompt delivery

Call on us.

Wyandotte CHEMICALS
MICHIGAN ALKALI DIVISION
Wyandotte Chemicals Corporation, Wyandotte, Michigan. Offices in principal cities.

PCC
Precipitated Calcium Carbonate
U.S.P. and Technical Grade
MISSISSIPPI LIME COMPANY
Alton, Illinois

CMC

ICI **IMPERIAL CHEMICAL INDUSTRIES LIMITED**

Ammonium Chloride, Grey and White • Ammonium Bicarbonate USP • Ammonium Carbonate • Bleaching Powder Tropical 34%-36% Cl_2 • Calcium Formate • Chlorinated Rubber • Copper Cyanide • Potassium Cyanide • Sodium Cyanide, all grades • Zinc Cyanide • Sodium Aluminate • Sodium Bicarbonate USP and Tech. • Sodium Carbonate Monohydrate • Sodium Perborate • Trichlorethylene, all grades • Urea, 46% Tech. • 3,5,5 Trimethyl Hexanol • 2:4 Dimethyl 6-Tertiary Butyl Phenol • Hexachloroethane

SPENCE **PETER SPENCE & SONS LIMITED**

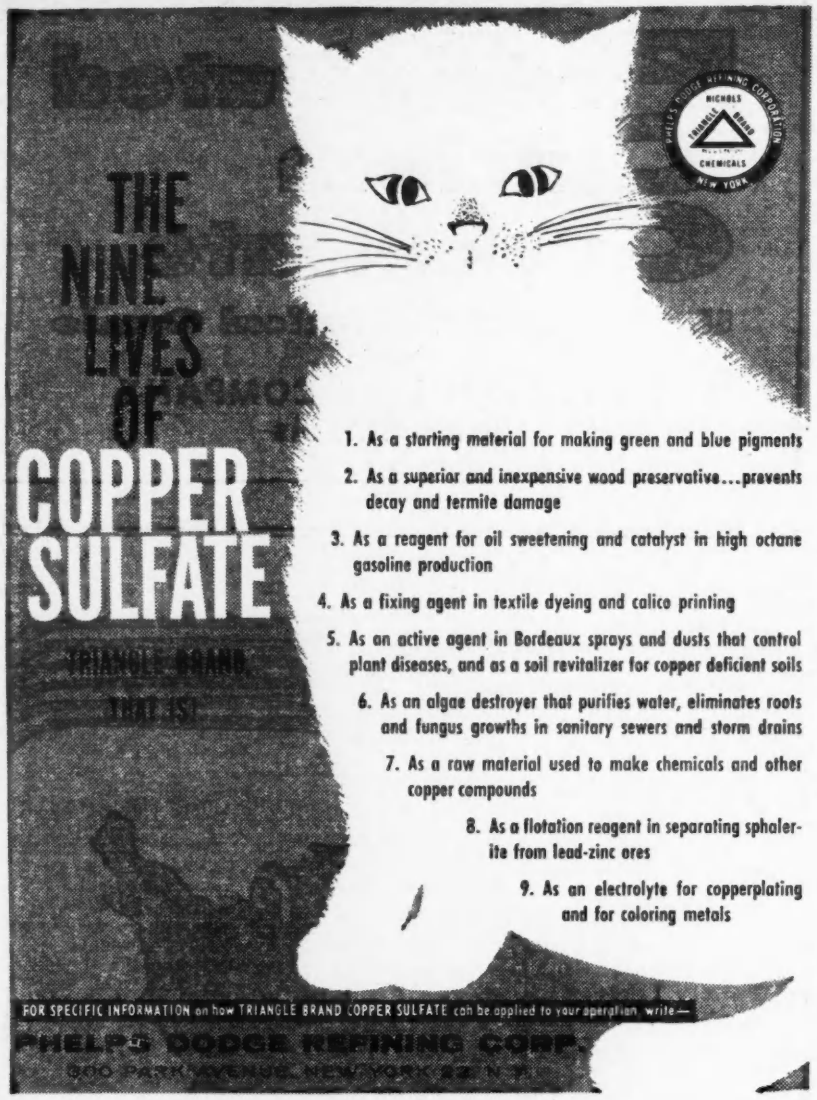
Aluminum Sulphate, Iron Free • Ammonia Alum • Butyl Titanate • Potassium Alum • Titanium Potassium Oxylate • Cobalt Molybdenum Catalysts

DEEPWATER CHEMICAL CO., LIMITED

Iodine, Resublimed USP and Reagent * Potassium Iodide, USP and Reagent * Potassium Iodate, USP and Reagent * Special Potassium Iodide Mixtures * Cuprous Iodide, Tech. * Sodium Iodide

LCL quantities available from Distributor Stocks in your area. This is only a partial listing of the items we offer. Write for complete product listings.

CHEMICAL MANUFACTURING CO., INC.
444 Madison Ave. • New York 22, N. Y.
714 West Olympic Blvd. Los Angeles 15, Calif.
114 Sansome Street San Francisco 4, Calif.


THE NINE LIVES OF COPPER SULFATE
PHELPS DODGE REFINING CORPORATION
NICHOLS COPPER COMPANY
TRIANGLE BRAND CHEMICALS
NEW YORK
1. As a starting material for making green and blue pigments
2. As a superior and inexpensive wood preservative...prevents decay and termite damage
3. As a reagent for oil sweetening and catalyst in high octane gasoline production
4. As a fixing agent in textile dyeing and calico printing
5. As an active agent in Bordeaux sprays and dusts that control plant diseases, and as a soil revitalizer for copper deficient soils
6. As an algae destroyer that purifies water, eliminates roots and fungus growths in sanitary sewers and storm drains
7. As a raw material used to make chemicals and other copper compounds
8. As a flotation reagent in separating sphalerite from lead-zinc ores
9. As an electrolyte for copperplating and for coloring metals
FOR SPECIFIC INFORMATION on how TRIANGLE BRAND COPPER SULFATE can be applied to your operation, write—
PHELPS DODGE REFINING CORP.
300 PARK AVENUE, NEW YORK 22, N. Y.

Cranberries Leading to Major Additives Probe

—Continued from page 3

by farmers that the general public has reason to expect?

Some 300 or more representatives of industries subject to regulation by FDA heard no answers to these questions at last week's two-day meeting of the Food Law Institute with FDA officials on problems developing out of the food additives law. Answers to such questions will have to await further developments.

What the representatives did hear, however, were more details as to policy and thinking by FDA officials in the administration of the law. During an extensive question and answer period, representatives learned more on FDA thinking relative to testing procedures, the meaning of the phrase "generally recognized as safe by experts," importance of guarantees, and information FDA will require in clearing a substance for safe use.

From the chemical additives manufacturers' standpoint, the most pressing problem is the deepening shadow of midnight —March 4, 1960—the deadline for filing petitions on additives in use before January 1, 1958, said Kenneth E. Mulford of Atlas Powder Company, chairman of the food additives committee of Manufacturing Chemists' Association.

He added that Secretary Flemming has intimated that he believes the limited number of filings thus far is due to an unwarranted expectation that he will extend the deadline. It was Mr. Mulford's observation, however, that in general the food industry and its suppliers have been diligent in attempting to compile the necessary data so that, if possible, they can meet the March 5 deadline.

Not Companies' Fault Entirely

"In fairness," he said, "it should be pointed out that many companies are by no means solely responsible for the difficult position in which they find themselves. A number of administrative and rule-making problems have arisen. The adequacy of previously acceptable toxicological studies has been questioned—giving rise to confusion, potentially sizable expenditures and inherent time delays."

FDA officials, however, gave no assurances that there will be any blanket extensions of the deadline by the secretary. They explained that the secretary can grant extensions if there is no hazard to health involved, and they suggested that in cases where testing work is under way and cannot be completed before the March 5 deadline that the industry "come in and discuss it with us."

"Will FDA recognize the difficulties facing the food packaging people to make the necessary testing on migration that is required by the law and grant the industry a one-year exemption?" That was a question that popped up frequently.

But FDA's answer was this:

"How can you issue a blanket exemption on an unknown quantity of a substance with an unknown toxicity?"

At one point the Delaney cancer clause was raised in a question relative to veterinary drugs. The questioner made reference to FDA's dislike of this clause, but Winton B. Rankin, assistant to the Commissioner of Food and Drugs, said that he is "not aware that FDA is not in sympathy" with the Delaney amendment. He said that FDA is advised by responsible scientists that they do not know how to devise a safe dose of a cancer-producing substance.

In response to other questions, FDA officials said they do not regard negative reports on literature dealing with the safety of a substance as satisfactory evidence of safety. The fact that there is nothing to be found in the literature on a substance is not acceptable to FDA as an indication of safety.

Material Is Confidential

Toxicological data submitted with petitions for clearance of substances is regarded as confidential information and any inquiries concerning this information will be referred by FDA to the person who supplied the data. FDA officials made it clear, however, that they do not like this restriction and said that they feel it is a mistake to keep secret any data relative to the toxicity of a substance.

There were a number of questions having to do with the matter of "general recognition" of the safety of a substance and how this "general recognition" is to be obtained. The reply was that when FDA does not know whether a substance is generally recognized as safe by qualified experts, the question will be circulated to a list of about 800 scientists and a decision made on the basis of their replies.

It was explained by William Goodrich, counsel for FDA, that the food additives law refers to qualified experts in the general sense of the term and does not necessarily mean that general recognition of the safety of a substance must be by "qualified experts on a particular ingredient or substance."

Look to BECCO first for

Peroxygen Chemicals

including

- Hydrogen Peroxide
- Peracetic Acid
- Sodium Perborate
- Ammonium & Potassium Persulfates
- and other Peroxygen Chemicals

Write for list of free technical bulletins.

BECCO Chemical Division

Food Machinery and Chemical Corporation

Station B, Buffalo 7, New York

for top quality

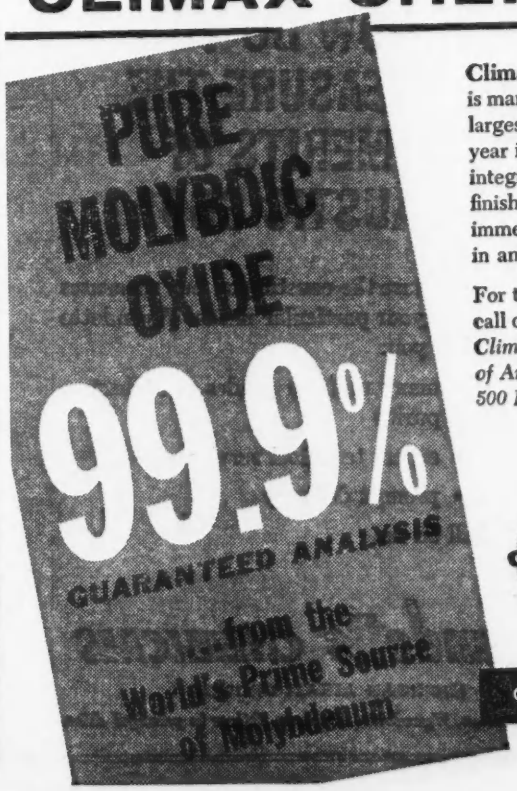
CAUSTIC SODA

YOU CAN DEPEND ON

DOW

Call our nearest sales office or write: THE DOW CHEMICAL COMPANY, MIDLAND, MICHIGAN

CLIMAX CHEMICALS



Climax Pure Molybdic Oxide is manufactured from the world's largest single source of supply — year in, year out . . . under fully integrated facilities, from mine to finished product. It is available for immediate shipment from stock — in any quantity.

For technical information or samples, call or write: *Chemical Sales Dept., Climax Molybdenum Co., a division of American Metal Climax, Inc., 500 Fifth Ave., New York 36, N. Y.*

CLIMAX CHEMICALS

CLIMAX MOLYBDENUM CO.

A division of American Metal Climax, Inc.

Jobs & People

Abbott Laboratories, North Chicago, Ill.—**Laverne T. Olmstead** has been appointed manager of a newly-organized sales district headquartered at Toledo, Ohio, and **Charles R. Renegar** has been advanced to manager of the Chicago district.

American Cyanamid Company, New York—**James A. Feeney** and **John H. Smith** have joined the company's engineering and construction division, Mr. Feeney as product engineer and Mr. Smith as intermediate engineer.

Diamond Alkali Company, Cleveland, Ohio—**William A. Gallup** has been named senior research chemist in the plastics division.

E. I. duPont de Nemours & Co., Wilmington, Del. — **Frederick B. Downing** has retired after forty years with the company. He is credited with having helped pioneer the development of neoprene synthetic rubber, tetraethyl lead antiknock compound and fluorine chemicals.

General Electric Company, Pittsfield, Mass.—**Richard J. Keates** has been named manager of manufacturing engineering in the phenolic products section of the chemical materials department.

General Mills, Minneapolis, Minn. —**T. F. McAdam** has been appointed sales representative for technical grades of soybean and safflower oils in the New York City area.

Harchem Division of Wallace & Tiernan, Inc., Belleville, N. J.—**William C. Wiley** has been named product development manager, **William G. Paul** representative for fatty acids in the Illinois area, **C. John Ebbrecht** representative for fatty acids in the New England and New York area, **Wallace E. Riffelmacher** sales representative for chemicals and plasticizers in the New England area, and **Raymond C. Wolfert** sales representative for Harchem plasticizers in the midwest.

Jefferson Chemical Company, Houston, Tex.—Four scientists have been added to the company's research staff: **Dr. Richard L. Rowton, A. A. Szemborski, Dr. Walter H. Brader, Jr.,** and **Miss Elaine Peters.**

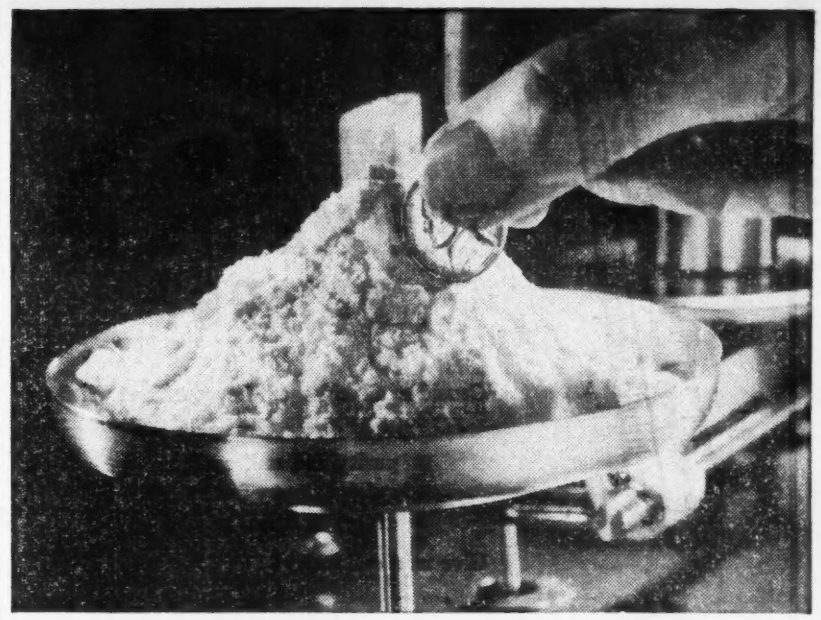
Sentinel Chemicals, Inc., Houston, Tex.—**Dr. E. J. McMullen** has been appointed executive vice-president and director of research and development.

Stauffer Chemical Company, New York—**Joseph G. Walsh** has been made director of the patent department.

Sun Chemical Corporation, New York—**Jesse Ziffer** has been appointed office manager and administrative assistant to **Lyle B. Paris,** who is general manager of the eastern building materials division of Sun's A. C. Horn Companies subsidiary.

Union Carbide Chemicals Company, a division of Union Carbide Corporation, New York—Four men have been added to the chemicals research department: **William H. Cook, Joseph V. Petrone, Edward A. Rick** and **John C. Spicer. Thomas M. Tyrell** and **Donald W. Urban** have been named technical representatives, Mr. Tyrell in the New York district and Mr. Urban in the Atlanta district.

United States Rubber Company, New York—**Dr. Arthur E. Brooks,** assistant director of research and development, has retired.



How to save more than a nickel on every pound of

COMBINED SULFUR

If you're buying sodium sulfide as a source of combined sulfur, you can get your sulfur for about 5 cents a pound less *by switching to Hooker sodium sulfhydrate.*

You get about 24.6 lbs. of combined sulfur in 100 lbs. of sodium sulfide. The same weight of sodium sulfhydrate gives you about 40 lbs. of sulfur.

At current prices, the sulfur in sodium sulfide costs you about $.244 a pound. In sodium sulfhydrate, it's only about $.181.

But you save *more* than the difference, because sodium sulfhydrate contains less water of crystallization—making freight costs lower.

Why not explore this further with your Hooker salesman? He can help you with your specific problem.

You might also like to write for data sheets on these two sulfides.

HOOKER CHEMICAL CORPORATION
811-4 Forty-seventh Street, Niagara Falls, New York

Sales Offices: Chicago Detroit, Los Angeles, New York, Niagara Falls, Philadelphia, Tacoma, Worcester, Mass. *In Canada:* Hooker Chemicals Limited, North Vancouver, B. C.

HOOKER CHEMICALS PLASTICS

INDUSTRIAL CHEMICALS

QUALITY in QUANTITY —at prices that are always competitive!

a new source for

ZINC SULPHATE

Available for immediate delivery at all times . . . . from warehouse stocks, at attractive prices.

for agriculture

SPECIALLY FORMULATED FERTILIZERS
COPPER SULPHATE CRYSTALS
COPPER SULPHATE BASIC
DDT • UREA • MURIATE OF POTASH
SUPERPHOSPHATE Single & Triple
SYNTHETIC DETERGENTS • AMMONIUM SULPHATE
DICALCIUM PHOSPHATE • ANHYDROUS AMMONIA
NITROGEN SOLUTIONS

BOSTON 10, MASS.
PORTLAND, CONN.
PROVIDENCE 3, R. I.
PHILADELPHIA 6, PA.
BALTIMORE 1, MD.
CHICAGO 1, ILL.

Philipp Brothers Chemicals, Inc.

COLISEUM TOWER BUILDING
10 COLUMBUS CIRCLE · NEW YORK 19, N. Y. · JU 6-6020

HOW DO YOU MEASURE THE MERITS OF BICARB?

Consider all sides of the question! With Wyandotte's sodium bicarbonate, you get:

- purity and uniformity
- quick delivery from stock
- expert technical service

Give us a call today!

Wyandotte CHEMICALS

MICHIGAN ALKALI DIVISION

Wyandotte Chemicals Corporation, Wyandotte, Michigan. Offices in principal cities.

Manufacturers of

Red and Black **COPPER OXIDE**

COPPER SCALE

ROBERT A. COUPE, 260 Rhode Island Ave., PAWTUCKET, R. I.

Telephone PAwtucket 3-4944

SD SMITH-DOUGLASS CHEMICALS

3 PRODUCTION POINTS mean better service . . .

STREATOR, ILL.

NORFOLK, VA.

PLANT CITY, FLA.

Potassium Silicofluoride

Continual, uninterrupted production 12 months a year.

For specifications and prices, write

KAWECKI CHEMICAL CO.

220 East 42nd Street, New York 17, New York

Exclusive Sales Agents For

SMITH-DOUGLASS COMPANY, INC.

5100 Virginia Beach Blvd., Norfolk, Va.

LARGEST PRODUCER OF KSF IN THE UNITED STATES

Styrene: Monsanto's Poser

—Continued from page 3

year, it's figured that output of the monomer in 1959 will be within 200 million pounds of total industry capacity.

Thus, say the market analysts, a 200-million-pound hike is not unreasonable. But, they are more than a little surprised that Monsanto is taking on such a big load all by itself.

Monsanto, no doubt, is banking heavily on stepped-up demand from the synthetic rubber industry, which has been using great gobs of styrene monomer this year despite the prolonged steel strike. Then, too, there are styrene polymer and copolymer resins, production of which may well hit 850 million pounds in 1959.

Apart from Monsanto, the only other styrene monomer producer known to be intent on hoisting its capacity is Foster-Grant Company. Capacity at its 90-million-pound plant at Baton Rouge, La., was raised 15 million pounds this year. What's more, another 30-million-pound expansion is already in the works.

Shell Chemical Corporation, which has a 135-million-pound monomer plant at Los Angeles, is keeping mum about its plans. Shell is just now getting involved in polystyrene in a small way via a deal with American Cyanamid Company to use its plant at Wallingford, Conn. Shell means to ship in monomer from the west coast.

Carbide, Koppers, Cosden Mum

Neither Union Carbide Corporation nor Koppers Company nor Cosden Petroleum Corporation, which together account for better than 20 percent of the styrene market, are saying nothing for the present about expansion.

Nor are the rubber companies talking. Last such known styrene venture was a few years back when Firestone Tire & Rubber Company threatened to build a 150-million-pound monomer plant at Orange, Tex. A 4-cent price drop on synthetic-rubber-grade styrene killed that idea, and not much has been heard about styrene from the rubber producers since.

But, perhaps, the biggest sphinxes of all are the petroleum companies.

Will Gulf Oil Corporation turn to styrene at Port Arthur, Tex., and thus add another 220 million pounds of monomer capacity to the market? And what about Humble Oil Company? Will it integrate downward from benzene at Baytown, Tex., and jump in with another 400 million pounds of styrene?

Whatever the answer, it's apparent that Monsanto isn't worried. Its edge may lie partly in its styrene polymer plants at Springfield, Mass.; Cincinnati, Ohio, and Long Beach and Santa Clara, Calif. Expansions are going on at all of these facilities and herein may lie the key to its 1962 styrene monomer target of 560 million pounds.

MARBON CHEMICAL BUYER: Frederick Knight, named chemcial buyer for Marbon Chemical Division of Borg-Warner Corporation, Washington, W. Va.

Drug Men Want Discussion

—Continued from page 5

kilogram dosages used in FDA animal tests).

- FDA admits that it has not tested all of the colors proposed for delisting, assuming that other metallic salts will behave similarly to those tested. With respect to new drug applications, the administration has never permitted companies to omit all tests on different salts of therapeutic agents, and PMA feels that such requirements should apply to the government as well as to private citizens.
- Member firms have distributed millions of dosage forms colored with these dyes without any reports of harm and FDA has stated that no reports of injury have been received from users of lipsticks, drugs or foods containing these colors.

WHITE ARSENIC (Arsenic Trioxide)

AMERICAN FIRSTOLINE CORP.

93-03 SUTPHIN BLVD.
JAMAICA 35, NEW YORK
Phone: AXtel 1-8200
Cable Address: FIRSTOLINE, NEW YORK

NITROSYL CHLORIDE

HENRY BOWER CHEMICAL MFG. CO.

30TH AND GRAY FERRY RD. PHILADELPHIA 46, PENNA.

Danitra

POTASSIUM NITRATE

Granulated, powdered and crystals. Special particle sizes can be furnished to specifications.

Davies Nitrate Co., Inc. 118 LIBERTY STREET NEW YORK 6, N. Y.

REctor 2-6095

WESTERN PENNSYLVANIA CHEMICAL CO., INC.

MAIN OFFICE

4125-41 Sixth Avenue, Altoona, Pa.

Acetic Acid	Caustic Soda	Muriatic Acid	Sodium Metasilicate
Acetone	Liquid Chlorine	Nitric Acid	Sodium Bichromate
Aluminum Sulphate	Copper Sulphate	Paradichlorobenzene	Sodium Sulfite
Anhydrous Ammonia	Di-Sodium Phosphate	Perchlorethylene	Sulphuric Acid
Aqua Ammonia	Ethylene Dichloride	Potassium Permanganate	Sodium Fluoride
Barium Carbonate	Ferrous Sulphate	Phosphoric Acid	Sodium Hydrosulfite
Battery Acid	Formaldehyde	P. H. Plus Blocks	Sodium Sulfate
Bicarbonate of Soda	Formic Acid	Proprietary Solvent	Sodium Silico Fluoride
Borax	Hydrogen Peroxide	Purex	Trichlorethylene
Bottle Alkali	Industrial Floor Dry	Santosite	Toluol
Calcium Chloride	Isopropyl Alcohol	Soda Ash	Tri-Sodium Phosphate
Calcium Hypochlorite	Lime	Sodium Bisulfite	Xylol
Carbon Tetrachloride	Liquid Sulfur Dioxide	Sodium Hexametaphosphate	Urea
Caustic Potash	Methanol		

BRANCH OFFICES

Glassport Elizabeth Road, P. O. Box 366, Elizabeth, Pennsylvania, Phone HO 2-7525

1543 West 38th St., P. O. Box 158, Erie, Pa., Phone GL 4-8151

Brown & Catherine Sts., P. O. Box 89, Middletown, Pa., Phone WH 4-4638

Large warehouse stocks located strateg cally to assure prompt same day or overnight de ivery. Operate fleet of 52 trucks for servicing of less truckload, full truckload and tank truck shipments. Recognized repackers of Acids, Chlor ne, Solvents and other heavy chemica s.

Bristol Says It Fought in Tetracycline Jungle

—Continued from page 4

two bulk customers, Upjohn and Squibb, the company was forced to indemnify them against infringement proceedings, which left it the sole target of Pfizer's suit, he said.

Mr. Schwartz went on to recount a series of meetings he had held with Pfizer's president, looking toward a settlement of the suit. From an opening bargaining position in which Mr. Schwartz offered a 2 percent royalty and Mr. McKeen demanded 10 percent the two men progressed to an agreement on 3½ percent.

According to Mr. Schwartz's testimony, he was planning at the time to make the inherent co-production issue the company's main defense if the infringement suit came to court. It was not said whether this had been brought up in the discussions, but Mr. McKeen's earlier testimony indicated that it was not.

Corroborating one phase of Mr. McKeen's testimony, Mr. Schwartz said that Pfizer had been in a mood to settle the case because of its desire to avoid unfavorable publicity.

Asked about the element of price competition, Mr. Schwartz pointed to the industry's practice of giving free merchandise to hospitals, which he said functions as price competition with triggering an industry-wide reduction.

Why, asked Mr. Klotz, didn't Bristol post a lower price when it entered the tetracycline field, as a means of luring business from Pfizer and Cyanamid, who were already entrenched.

"It would have been foolhardy," Mr. Schwartz replied. "I think that any new prices that we might have put out, lower than theirs, would have been met in a matter of hours."

Bristol's ideas on competition, he said, centered on increasing its sales force and promotion facilities, manipulating the free-goods technique and developing a better product. On the latter score, he noted that Bristol substantially increased its share of the tetracycline market by introducing tetracycline phosphate complex.

No information concerning Bristol's free goods policy, he said, had ever been furnished to competitors.

Cross-examination by Andrew C. Goodhope, chief commission lawyer, probed hard to find evidence of price understandings between Bristol and the other respondents, foreknowledge of co-production, or agreements on what attitude the companies would take in the patent office.

Another Charge Denied

In reference to Bristol's contracts to supply bulk tetracycline to Squibb and Upjohn, Mr. Goodhope directed this question to the witness:

"And as I understand it, you then agreed that thereafter the price would be set at a figure which would permit them [Squibb and Upjohn] to have a three-to-one ratio at the then going price of aureomycin, is that right?"

The witness answered that it was not so agreed.

The commission's charge of conspiracy took on a note of irony several times during Mr. Schwartz's testimony, when it developed that the defendants were quite willing to compete, even in the courtroom, when their interests conflicted. This was taken by some observers to be a strong presumption that their relations in the commercial world were more competitive than conspiratorial.

At one point in the proceedings, counsel for Pfizer argued strongly against admission of certain documents that Bristol was offering in order to back up its own case.

But defense lawyers closed ranks and won a favorable ruling from examiner Robert Piper when Mr. Goodhope brought up the matter of certain price differentials that had been obtained for tetracycline shipments to Canada and Brazil. Mr. Piper said that too many collateral factors were involved to make such differentials susceptible to a price-fixing interpretation. He said further that it was too late in the day for the commission to bring up the matter, since it had neglected to press it before resting its case.

Look to BECCO first for

Ammonium Persulfate
Potassium Persulfate
as well as
• Hydrogen Peroxide
• Peracetic Acid • Sodium Perborate
• and other Peroxygen Chemicals
Write for list of free technical bulletins.

BECCO Chemical Division
Food Machinery and Chemical Corporation
Station B, Buffalo 7, New York

Stauffer CHEMICALS SINCE 1885

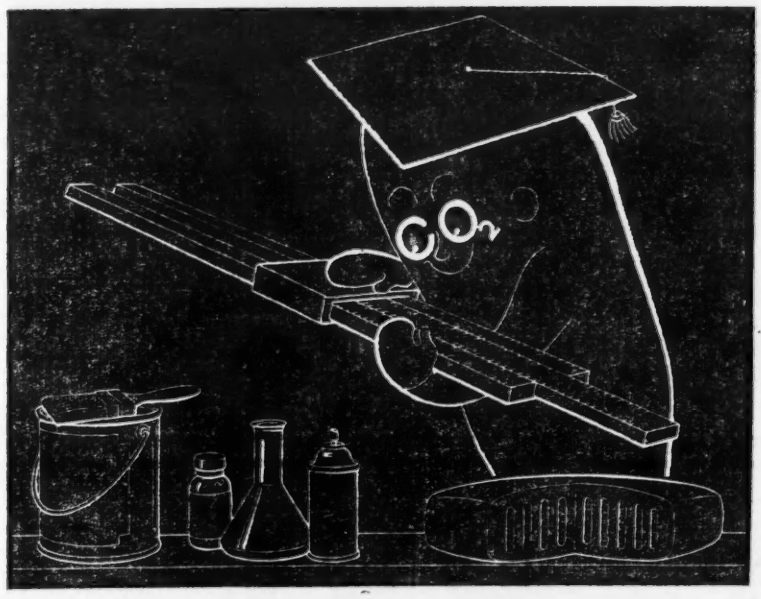
Boron Trichloride
For combating magnesium fires
•
For catalytic uses
ALUMINUM CHLORIDE
ANTIMONY TRICHLORIDE
BORON TRICHLORIDE
SILICON TETRACHLORIDE
TITANIUM TETRACHLORIDE
ZIRCONIUM TETRACHLORIDE

STAUFFER CHEMICAL COMPANY
380 Madison Avenue, New York 17, N. Y.
636 California Street
San Francisco 8, California
824 Wilshire Boulevard
Los Angeles 17, California
Prudential Plaza, Chicago 1, Illinois
326 South Main Street, Akron 8, Ohio
Box 9716, Houston 15, Texas
North Portland, Oregon

SODIUM SULPHATE
Anhydrous

F. M. Ross & Co.
MUrray Hill 2-7136
155 E. 44th Street • New York 17, N. Y.
EXpress 2-2121
3930 Glenwood Drive • Charlotte, N. C.

SODIUM SILICOFLUORIDE
OLIN MATHIESON CHEMICAL CORPORATION
BLOCKSON
BLOCKSON CHEMICAL COMPANY • Joliet, Ill. • *Division of Olin Mathieson Chemical Corporation*



Chances are...Pureco CO_2 has solved a problem like yours

Today Pureco CO_2 is helping to solve many industrial problems for researchers and production men everywhere. The applications of CO_2, one of the most versatile of chemicals, are practically unlimited.

TYPICAL APPLICATIONS

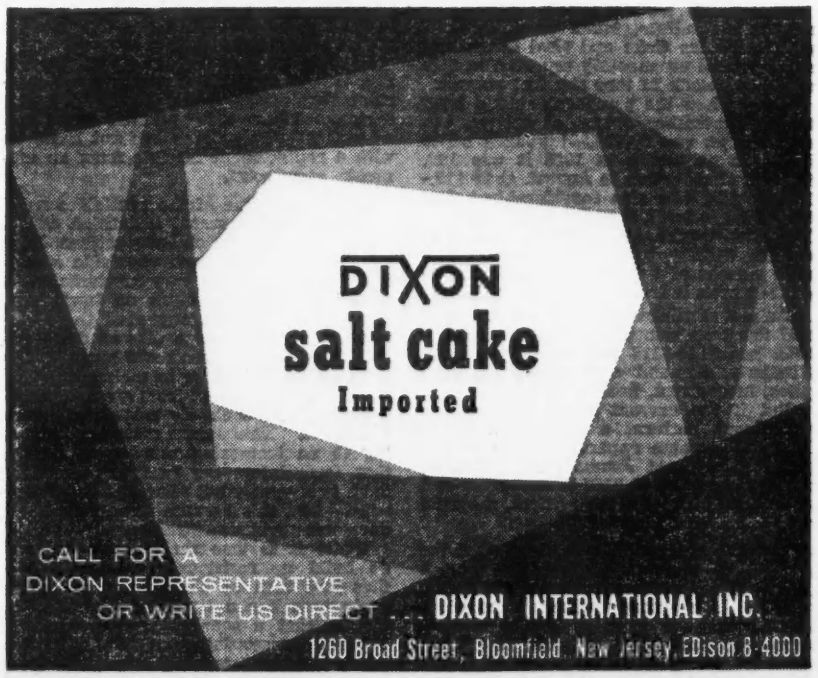
INERT GAS — REFRIGERANT — ACTIVE INGREDIENT

Pharmaceuticals	Insecticides
Dyes	Resins
Paint	Rubber Trimming
Lacquer	Plastics
Packaging	Vacuum Traps
Aerosols	Low Temperature Testing
Purging Tanks and Mains	Lyophilizing (low temperature drying)
Inert Pressure Transfer	Asbestos Cement Cure
Fumigant Carrier	Carbonation
Capsulating	PH Control
Powdering	Foam Rubber
Flushing Molten Metals	Water Treatment
Foam Plastic	Manufacture of Carbonates

If any of the above applications suggest related uses in your processing methods, we would be pleased to discuss them with you. Our wide technical experience in applying CO_2 in its solid (DRY-ICE), gaseous and liquid forms, to industrial problems is available to help you. Call your Pure Carbonic Representative today.

PURECO CO_2

Pure Carbonic Company
A Division of Air Reduction Company, Incorporated
150 EAST 42ND STREET, NEW YORK 17, N. Y.
AT THE FRONTIERS OF PROGRESS YOU'LL FIND AN AIR REDUCTION PRODUCT



POTASSIUM CHLORIDE

for the Chemical and Fertilizer Industries

TECHNICAL GRADE POTASSIUM CHLORIDE
99.7% K Cl Minimum
HIGRADE GRANULAR MURIATE OF POTASH
HIGRADE MURIATE OF POTASH
GRANULAR MURIATE OF POTASH

UNITED STATES POTASH COMPANY
DIVISION OF UNITED STATES BORAX & CHEMICAL CORP.
50 ROCKEFELLER PLAZA, NEW YORK 20, N.Y.

Reg. U.S. Pat. Off.

DUVAL
MURIATE OF POTASH
SULPHUR

DUVAL SULPHUR and POTASH CO.
Exclusive Distributors
ASHCRAFT-WILKINSON CO.
ATLANTA, GEORGIA
Cable Address: Ashcraft
District Offices
Norfolk, Va. • Charleston, S.C. • Tampa, Fla.
Jackson, Miss. • Columbus, Ohio • Montgomery, Ala.
Des Moines, Ia.

DDT

LEBANON CHEMICAL COMPANY

P. O. Box 532, Lebanon, Pennsylvania

SULPHUR SPECIALISTS

Freeport Sulphur Company: Skilled technical staff assists consumers in solving virtually any problem related to transport, storage and processing sulphur, including:

- Sulphur Handling and Storage — Solid or Liquid
- Sulphur Burning • Sulphur Melting
- Sulphur Filtration

Freeport is the oldest and second-largest producer of sulphur in the U.S. and has more than 45 years' experience in providing information and guidance to users. Its engineers are readily available for on-the-job visits.

Call, write or wire Frank L. Jackson, Manager of Technical Services.

FREEPORT SULPHUR COMPANY
161 East 42nd Street • New York 17, N. Y. • Murray Hill 7-8100

Agricultural Chemicals

What'll fertilizer demand be like in 1960? About the same as in 1959, the Agriculture Department says, and, all things considered, this seems to be a fairly optimistic prediction. Consumption of fertilizers this past season was from five to ten percent higher than in 1958, USDA reports, though it fails to mention that 1958 wasn't exactly a banner year. Some in the trade, however, find the outlook a bit brighter. Figuring that total tonnage was likely up from seven to nine percent in '59, they think it logical to expect another substantial—though perhaps smaller—sales gain in the coming season. All concerned admit, of course, that the extent of the business improvement, if such there be, will be governed pretty much by variables like weather, farm legislation and the general tone of the nation's economy.

On this score, USDA notes that the "price of the crop, as well as the cost of fertilizer may influence the decision with respect to fertilizer use." Cited, for example, is the current situation where, because of lower corn prices, it takes 74 bushels of corn to buy a ton of ammonium nitrate. In contrast, it took only 70 bushels in 1957.

Also a significant consideration in any forecast of fertilizer consumption, Agriculture says, is the level of other costs of crop production. "As these other costs rise, more fertilizer would be needed to maximize returns on the investment in producing the crop."

In addition to providing fertilizer producers with some encouraging news, USDA in its 1960 outlook report also extends some left-handed compliments. For the past decade, it says, prices of fertilizers have changed very little. In fact, the department points out that prices of nitrogen materials averaged about three percent lower in '59 than in '58, while potash muriate prices were down about one percent. But just to spoil the record, superphosphate prices were slightly higher.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Nov. 21, 1958
110.95	110.95	110.52	110.31

For Current Prices see page 10

Animal and Plant Foods

Ammonium Nitrate—Against imports of 24,425 tons, exports of ammonium nitrate in September were 22,798,304 pounds, or approximately 11,399.1 tons, valued at $711,584.

Of total exports, Korea got the lion's share, 15,998,782 pounds, while Mexico, the next largest purchaser, got 6,188,522 pounds. Small quantities went to Cuba, Sweden, Arabia and the Philippine Republic.

Ammonium Sulfate—Imports of ammonium sulfate in September amounted to 21,834 tons and were shipped here by Canada (12,324), The Netherlands (5,598) and Belgium (3,912).

Exports the same month totaled 21,522,421 pounds, valued at $334,595. Spain got the bulk of this material, 11,063,000 pounds, while our irascible neighbor to the South, Cuba, took 5,188,000. Brazil and Argentina bought better than a million pounds apiece, with the remainder of the exports divided among Mexico, Canada, Venezuela and Bolivia.

Production statistics for by-product ammonium sulfate, taken from the Bureau of Mines Coke and Coal Chemicals survey, were erroneously reported in this space last week in tons stead of pounds.

Here is how the paragraph should have read: "September output of sulfate, the report says, was 29,114,391 pounds while in the same month in 1958 it was 102,989,100. Production in August, at 29,118,148 pounds, was also considerably below the year ago level, the Mines' figures show. Yet, despite the great July-August production decline, total output for the first nine months of the year climbed to 939,411,148 pounds from 911,447,500 in '58."

Animal Proteins—Prices for fishmeal and fishscrap remain unchanged at $118-$122 and $114-$117 per ton, respectively. Similarly, demand continues light, supplies, in contrast, heavy.

But if the current season follows the traditional pattern, a firming trend is likely to become apparent as the winter progresses. Last January, for example, meal was quoted at $162-$164 per ton and even at these record high prices, material was quite hard to come by.

Potash—It is reliably reported that the second US firm to dig into the potash fields of Saskatchewan province, Canada, will not be starting production until late in 1960 or early in 1961. Earlier, indications were that the firm would be capable of limited output before the end of 1959 (OPD, 8/4/58).

It appears that this considerable delay is due to frequent flooding of the mine shaft. However, freezing of the water at the twelve-hundred foot level which was started recently is expected to be completed this month, at which time, sinking of the mine shaft, delayed about a year, will be resumed.

At the firm's Esterhazy site, several service and administration-type buildings have been constructed. Employment is reported to be 400 persons, one-half of whom, it's said, will be laid off this winter.

Urea—Exports of urea in September totaled 3,662,760 pounds, or 1,831 tons, valued at $158,061. Major purchasers included Columbia (2,223,000 pounds), Mexico (433,980 pounds) and Costa Rica (428,800). Lesser amounts were bought by Canada, Guatemala, Haiti, Panama, Jamaica, Ecuador, the Bahamas and Indonesia.

Pesticides

Cube Root—Prices for powdered cube root of 5 percent rotenone content were reduced 4 cents per pound a month ago. Action brought the truckload listing to 21c. per pound, the less truckload to 22c., on a works basis.

Explaining the decline, trade sources point to the two year long downtrend in prices and a parallel development, the introduction of newer pesticides.

It's noted, for example, that several new systemic miticides have partially replaced rotenone dusts in the treatment of ticks and grubs on cattle. And this appears to be because the former chemicals are preventives, while the latter are corrective-type pesticides not called upon until the animal is already infected.

Heptachlor—Food and Drug Administration's announcement, October 27, proposing a zero tolerance for residues of heptachlor, a fruit, vegetable and grain spray, didn't completely stun the majority of people in the pesticides business, it was learned last week.

In fact, those fortunate enough to have a pipeline from Washington said that they had received "the word" early last summer. Consequently, formulators in this group aren't too concerned about FDA's intended ban because they've been able to keep inventories low. But those who didn't get wind of the rumors, however, may be a bit worried about how to dispose of outsize stocks, if need be.

What is particularly upsetting, sources say, is the fact that demand for heptachlor formulations was terrific this past season. They also pointed out that as yet, anyway, science has not come up with a replacement feasible from an economic standpoint.

Malathion—One of the pesticides much in demand last season, malathion enjoys an ever-broadening end-use pattern. Now, in addition to fruit and vegetable sprays, it is being used, and very successfully reportedly, to control mites on fowl. And just recently, USDA approved the chemical for control of horn flies on dairy cattle, which should mean more business.

Part of the increase in malathion sales, sources say, is coming from areas formerly dominated by a closely related chemical, parathion. This latter material, according to an increasing number of reports that formulators are receiving from the field, is allegedly not affording desired results. And this because some insects are developing resistant strains.

While it is true that insects can and do build up resistance to insecticides—flies just turn up their noses at DDT—spokesman for a leading formulator indicates that a goodly percentage of the reports concerning parathion's ineffectiveness stem from the user's desire to get a "newer" product.

Trade Name Chemicals & Specialties

Last year sales of phenolic, urea, melamine and vinyl adhesives, on a dry basis and including laminates, were said to total 385 million pounds, with phenolics leading the way. One prediction for this year gave total sales an increase of 80 million pounds over last year. The growth of current markets has played a big role in this vast sales increase. Use of plastics in building construction is growing; and vinyl formulations are being developed to meet the demands of the paper and packaging fields for high speed application items. Also, research by adhesive producers is leading to new improved products. For example, phenolics are being blended with elastomers and there are many resin combinations, either blends or copolymers, being given considerable attention.

Another expanding field is the flame-retarding agents. Strides have been made in fire protection, in such areas as dry-cleaning solutions, paints, textiles, paper, and many others. A recent development is fire-proofing subway and elevated track ties and other wooden structures on the rapid transit system. Most fires, said the Transit Authority, develop from brake shoe sparks or arcing third rail contacts which ignite foreign matter on the tracks.

Overall sales of optical brighteners are predicted to reach $14.0 million for this year, $14.7 million in 1960 and $18.8 million in 1965. It is generally felt that the paper industry will push the optical brightener market to these great heights. At this time use in paper is said to amount to 24 percent of the market. By 1965, it is estimated that paper's share should be up to 40 percent.

WHAT'S REPORTED ON HERE

Though coverage in the Trade Name Chemicals & Specialties market report encompasses twenty classes of chemicals, only a few of them are mentioned in this issue. Here's the entire list:

Adhesives, antibacterials and fungicides, antifoaming agents, antioxidants, antistatic agents, blowing agents, catalysts and accelerators, chelating agents, chemically processed oils, emulsions and latexes, enzymes, fatty acid derivatives, feed supplements, filtering materials, ion exchange resins, surfactants, synthetic waxes, textile chemicals, thickening and suspending agents, and ultraviolet absorbers.

If you have suggestions for any additional materials that might be included in this section, write OIL, PAINT AND DRUG REPORTER'S Technical Editor, 30 Church street, New York 7.

Adhesives

Dow Corning Corporation has on the market a silicone adhesive trade named **"Dow Corning A-4000 Adhesive."** Said to cure at room temperature, it is used for bonding Silastic, Silastic coated cloth or other materials to metals, to silicone resin laminates or to Silastic itself.

"Dow Corning A-4000 Catalyst" is required to cure **"A-4000 Adhesive."** And the catalyst is supplied with each shipment of the adhesive. Dow Corning recommends a catalyst concentration of 4.5 parts by weight of the catalyst solution, as supplied to 100 parts of **"A-4000."** The company goes on to suggest that **"A-4000"** be used as soon as possible after the incorporation of the catalyst, although the catalyzed adhesive has a pot life of 4 to 8 hours.

Concerning usage of **"A-4000,"** Dow Corning explains that both surfaces to be bonded should be cleaned with a solvent, for example toluene or xylene, and then air-dried. After application of catalyzed **"A-4000"** to the surfaces, Dow Corning says that curing at room temperatures for 24 hours produces peel strength of 8 to 14 pounds per inch. The curing time can be shortened, continues the company, by exposing the adhesive to elevated temperatures in an air-circulating oven.

"Carboline Concrete Adhesive 192-34" is a modified epoxy, which requires the addition of a catalyst before application, produced by Carboline Company. Its general purpose is said to be as an adhesive for bonding new concrete to old concrete, for resurfacing large areas or repairing worn out spots on floors.

Carboline claims that **"Carboline Concrete Adhesive 192-34"** has a solids content of 91.5 percent by weight and 85.6 percent by volume. The company goes on to say that their adhesive should be applied over clean concrete only and is not recommended for use on old concrete soaked with oil and grease that cannot be cleaned properly.

Applied with either brush, spray or roller, Carboline says that only one coat of **"Carboline Concrete Adhesive 192-34"** is required, and if using a thinner, **"Carboline Concrete Adhesive Thinner 192-34"** should be used. Pot life of the adhesive is 2 hours at 75°F., shelf life is a minimum of 2 years, and the color is brick red only.

For best results, Carboline suggests that the new concrete be applied over **"Carboline Concrete Adhesive 192-34"** while it is still tacky. Then the adhesive should be allowed to dry for a period of 15 to 75 minutes during which period the company claims the new concrete will adhere nicely.

"Carboline Concrete Adhesive 192-34" is suggested for resurfacing entire floor areas in industrial plants where only a thin concrete layer may be used; and for patching concrete holes, gullies, or ruts in plants, driveways, sidewalks, etc.

Optical Brighteners

Sandoz, Incorporated, has a new optical brightener, **"Leucophor ACR,"** on the market, which is said to meet the finisher's demands for resin bath stability, whiteness, and non-tailing. The company says that the initials in the name **"Leucophor ACR"** indicate that this brightener is for application with acid catalyzed resins.

Described as being stable to acid and metallic salts and being anionic in character, Sandoz claims that **"Leucophor ACR"** is compatible with anionic and nonionic compounds. Another outstanding feature of this product, continues Sandoz, is its stability to zinc nitrate. Furthermore, **"Leucophor ACR"** can be added before or after addition of the catalyst, without danger of precipitation in the bath.

Sandoz goes on to say that after rigorous mill tests, it was proven that **"Leucophor ACR"** is free from tailing-off. Also, brightness tests taken at two foot intervals over the entire length of the cloth showed that whiteness at the beginning of the run was maintained uniformly throughout the entire length of the goods.

"Uvitex RS, RBS and **GS"** are water-soluble brightening agents produced by Ciba Company, Inc., to improve whites and bright pastel shades on cotton, rayon and nylon. The three are said to be similar in all respects except for the casts produced. **"Uvitex RBS"** yields a strong neutral white; **"Uvitex RS"** gives a white with a slightly redder cast; and **"Uvitex GS"** gives a white with a slightly greener cast.

All three are said to be pale yellowish powders which dissolve readily in hot water. They are weakly anionic and are stable in hard water. Ciba recommends that solutions not be heated with direct steam, and it is not advisable to use stock solutions.

Concerning application, Ciba says that the most efficient stage for applying **"Uvitex RS, RBS** and **GS"** is usually in the last wet processing operation, such as finishing or final rinsing, provided conditions are suitable; or they may be applied in a separate treatment after other operations. Finally, Ciba states that the uniform leveling properties of the three **"Uvitex"** brighteners make them especially suitable for padding applications, and their stability to chlorine and chlorite bleaches and other chemicals permits their use in a wide variety of processes.

Flame Retarding Agents

"Thermoguard L," antimony oxide, is a flame retardant put out by Metal & Thermit Corporation. According to the company, **"Thermoguard L"** is processed to yield a uniform white oxide of high purity with a controlled low tinctorial strength.

A very fine white powder, **"Thermo-**

—Continued on page 58

POLY-TERGENT

J-200 J-300 J-400 J-500

G-200 G-300 B-200 B-300

MATHIESON nonionic surfactants

Olin Mathieson's Surfactants are effective in a wide range of industrial applications as detergents, dispersants, emulsifiers, and wetting agents. They have found wide acceptance in the textile, pulp and paper and paint industries.

The characteristics of one or more of the Poly-Tergent group may be exactly suitable for applications in your own operations. You can easily check their properties against your particular requirements.

NEW—Technical data sheets are available for each Poly-Tergent. Write for a set today.

Poly-Tergent® is a trademark

OLIN MATHIESON
CHEMICAL CORPORATION
Chemicals Division • 745 Fifth Ave., N. Y. 22, N. Y.

6597-A

CHEMICAL FORECAST 1964

AROMATIC SOLVENTS
Benzene • Toluene

NITROGENATES
Urea • Ammonia

POLYMER CHEMICALS
Vinyl Resins • Polyethylene Resins • Styrene-Butadiene Synthetic Rubber

THE ALCOHOLS
Ethyl Alcohol • Methanol

ETHYLENE CHEMICALS
Ethylene Oxide • Ethylene Glycol • Diethylene Glycol

INORGANIC CHEMICALS
Caustic Soda • Chlorine

MISCELLANEOUS ORGANICS
Phenol • Detergent Alkylate • Formaldehyde

28 Statistical Tables and 19 Charts

$2.25

Oil, Paint and Drug Reporter
Reprint Department
30 Church Street, New York 7, N. Y.

ORGANIC PEROXIDES

WE GIVE THANKS
FOR YOUR PAST AND
FUTURE BUSINESS

LUCIDOL DIVISION

WALLACE & TIERNAN INCORPORATED
1740 MILITARY ROAD, BUFFALO 5, NEW YORK

RANEY CATALYST CO., INC.

Originators and Dependable Suppliers of

RANEY CATALYSTS

1322 Hamilton National Bank Bldg.
Chattanooga 2, Tenn.

Since 1925 Phone: Amherst 6-8616, Taylor 1-7823 Cable Address: RANI

Have you tried
JEFFERSON CHEMICAL'S
NEW ETHYLENE OXIDE?

You'll find the
BASICS you want
at PCI

You may be seeking a new supply source for an established plant. Or perhaps you're searching for raw materials to launch new manfacturing operations. Whatever your plans, at PCI you'll find these basics to help you build success into your expanding operations:

an ideal location in the heart of the growing Gulf Coast industrial area where 85% of the petrochemical industry is presently located and weather conditions are conducive to year-round operations;

desirable transportation facilities particularly for barging products along the Intracoastal Waterway into Mid-Continent America via the Mississippi River, or by barge or tanker to East Coast ports;

an ethylene pipeline, carrying highest purity ethylene, stretches from Lake Charles to Texas, providing you an opportunity to locate either in Louisiana or Texas if you plan to use ethylene for your raw material.

PCI already is privileged to serve leading companies in the rubber and chemical industries with the products they demand as they need them. We can provide you the same services.

Products*
BUTADIENE
AMMONIA
ETHYLENE
PROPYLENE
PENTANE AROMATICS
(Manufactured for Calcasieu Chemical Corp.)
ETHYLENE OXIDE
ETHYLENE GLYCOL
POLYGLYCOL
*For further information contact PCI Sales Department.

Development Chemicals**
CYCLOOCTADIENE
CYCLOHEXENE
VINYLCYCLOHEXENE
METHACROLEIN
CYCLOOCTANE
**For further information and available research quantities contact PCI Development Department.

PCI Petroleum Chemicals, Inc.
POST OFFICE BOX 8, NEW ORLEANS 8, LA.

Aliphatic Organics

Textile and rubber outlets taking a substantial tonnage of chemicals each year have continued to lend vigorous support to this market. The four month steel strike did not have an overly depressing effect in sales of chemicals here, and it was hoped that with the steelworkers back in harness and automotive companies plugging to get their production lines rolling again, the downturn in some resins markets, due to shortage of raw materials, might be corrected by the end of the year.

Man-made fibers continue to promise a business bonanza for chemical concerns and they are working hard to protect that potential. It is estimated that the major chemical companies making true chemical fibers spend about $45 million per year on research and development in order to improve their products. Polyolefins hold good potential and the acrylic fibers record over recent years has been a highly impressive one.

A producer recently reported that the firm would build a carbon disulfide plant at Delaware City, Del. The company also operates a fully automated disulfide plant at LaMoyne, Ala. Output of carbon disulfide moves between forty to fifty million pounds per month and the material comes into use in the production of carbon tetrachloride, cellophane, rayon and rubber processing chemicals.

Butadiene and styrene monomer sales in the synthetic rubber field have been helped along by the vigorous pace maintained in the rubber industry despite the steel strike. A factor in the sustained activity has been the good market for replacement tires during the past two years. Some firms in the replacement tire business estimate that sales this year are up as much as 25 percent over the comparable period last year.

Acetic Anhydride—Industry output is maintained at about 90 million pounds per month. Large volume use as an acetylating and esterifying agent in the production of cellulose acetate has continued to take a good part of production. Other outlets include the utilization of acetic anhydride in the production of dyes, pharmaceuticals and intermediates. Acid production has been well maintained. Producer inventories were at comfortable levels, according to trade reports.

Acetone — Industry capacity remains fully adequate for the substantial trade requirements for this all-purpose solvent. High solvent power of the ketones for vinyl resins and cellulose esters make this an indispensible chemical raw material, it is said.

Acrylonitrile—This market remains unchanged from previous report. Competitive conditions and overcapacity to supply the current market are looked upon as relatively temporary conditions. In the long pull, it is felt that the rapid growth rate of the man-made fibers markets will require all of industry capacity.

Polyolefin fibers have continued to come in for an increasing amount of attention. These materials are felt to hold great potential in the synthetic fibers market during the next five years. A fiber producer recently reported that the firm would go commercial in producing polypropylene fiber at its Covington, Va., location. The firm is reported to be the eleventh to produce polyolefin fibers in this country.

It is estimated that major chemical companies making true chemical fibers spend approximately $45 million per year in seeking out new process and engineering developments to improve the quality of their products.

Butadiene—The brisk demand from synthetic rubber outlets, which held up well during the steel strike period, is expected to continue to spark trading in this market.

Sales of replacement tires have remained on the upgrade this year after having played an important part in sustaining demand for rubber chemicals during the business recession of 1958. Report of some major firms in the replacement tire field last week indicated that sales volume this year was up from 20-25 percent.

With the nation's steel workers back at their jobs and hopes for contract settlement during the injunction period, prospects for new equipment sales were somewhat brighter. Auto production lines were still down, but the steel operating rate was slated to climb to about 80 percent of capacity last week and it was hoped that auto makers might be able to get rolling again within a few weeks. Estimates of the period of shutdown for the auto companies have ranged from four to six weeks. However, with the steel companies making a more rapid recovery than had been expected, the time may be scaled down. A severe cold snap in the midwest could slow operations somewhat, it was said.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 21, 1958
132.95	132.95	132.98	130.73

For Current Prices see page 10

Carbon Disulfide—A producer recently announced that a new plant for the production of carbon sulfide would be erected at Delaware City, Del. The unit is scheduled for completion in November, 1960, and will utilize methane and sulfur as raw materials. Another automated methane-sulfur plant is operated by the company at LaMoyne, Ala.

Another, but older commercial process for production, involves the use of carbon and sulfur.

Sources feel that expansions in the market are likely to be of the methane-sulfur type, although a large unit has to be built in order to be economical. In the older method (carbon-sulfur) a good grade of petroleum coke has become increasingly difficult to get and wood charcoal, if it is used, is difficult to work with.

Output of CS_2 according to Tariff Commission figures, runs to about 40-50 million pounds per month. Trade estimates indicate that roughly 5 percent of sulfur output goes to the production of carbon disulfide, which in turn is used in the production of carbon tetrachloride, cellophane, rayon and rubber processing chemicals.

A report in August of this year indicated that carbon disulfide will be recovered for the first time from off-gases of a rayon factory at Holywell, N. Wales. The regeneration unit operates on the principle of a multi-layered fluid bed, and is fully automated. Recovery of CS_2 is said to be about two-thirds.

Carbon Tetrachloride—This material, which lost markets in the dry cleaning industry, has happily more than regained the ground lost with the advent of aerosol propellants. Use as an intermediate and in fire extinguishing fluid also contribute good support.

Production continues about 25-35 million pounds per month and comes from sources producing carbon tet by chlorination of methane or by substitution of chlorine for sulfur atoms in carbon disulfide. The fact that carbon tet is not explosive or flammable has helped it to move into markets where gasoline or naphtha might previously have been used, it is said.

Formaldehyde—Production levels continue well maintained, although some sources have noted a slight slackening in orders in recent weeks. Major producers report no particular difficulty in supplying formaldehyde for prompt shipment.

In some quarters, on the other hand, a lull in the brisk pace of business would be welcomed as a period for rebuilding inventories to a more comfortable level. There is hardly a question of immediate shortage, but it is pointed out that since formaldehyde moves in multi-million pound quantities, suppliers like to have an adequate backlog of material on hand.

Total production of HCHO last year was nearly 1.4 billion pounds. However, output in the first eight months of 1959 amounts to 1.1 billion and, at that rate, a 1.6 billion pound figure is not out of reach for this year, according to trade estimates.

Furfural—Prices in this market remain unchanged at levels of long standing in the trade.

Tankcar listing, delivered East, is 12c. per pound; delivered West, 13c. Carload

Aliphatic Organics

lots in drums are priced at 13c. per pound on a works basis, while less carload lots, same basis, are 14c. per pound.

Furfural alcohol in tanks is priced at 18.4c. per pound, Memphis; carload of drums, 20c. per pound; less carload drum lots, 21c. per pound. Furfural alcohol at Newark, N.J., is priced at 21½c. per pound in carload drum lots, while less carload drum lots at this point are 22½c. per pound.

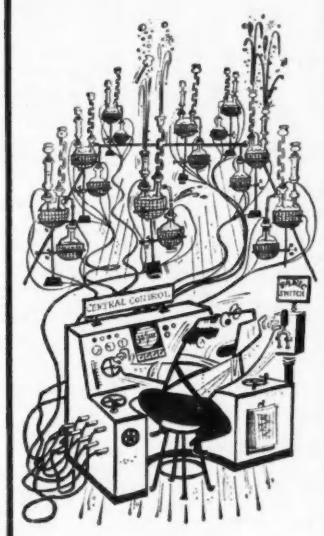
Perchlorethylene—Demand from dry cleaning outlets has continued on the upgrade, according to trade reports. Use as a degreasing agent is smaller since trichlorethylene has found extensive use in this field. Perchlorethylene may be used where light-weight metals are involved. It is pointed out that trichlor has the lower boiling point and in degreasing procedures the temperature of light-weight metals may rise so rapidly to the boiling point of trichlorethylene that condensation stops before the cleaning action is complete.

Sucrose—The market was firm at levels posted last month. As of October 1, refined sucrose was hiked 20c. per cwt. at most points. Price is quoted at $9.55 per cwt. Eastern refinery.

The market is not especially brisk. The quota on raw sugar is rapidly running out, it is reported, which means limited supplies and light buying activity. Suppliers reported little consumer resistance to the advances in price levels effected October 1.

Thichlorethylene—Principal outlet continues to metals for degreasing purposes. With steel companies back at work and auto companies plugging to get their production lines into operation again, it is felt that this chemical market should move into a period of active consuming demand by the first of the year. Volume has been fairly well maintained throughout the strike period, although some trade sources have reported a slight slackening in orders in recent weeks.

Imports continued to range around 2.5 to 4 million pounds per month. September imports jumped to 4.8 million pounds, according to Census Bureau report.



Why bother when you can get it from Eastman?

When you need a special organic in a quantity that strains your laboratory facilities or ties up your staff, try Eastman Organic Chemicals Department, *Distillation Products Industries,* Rochester 3, N. Y.

DPi

there are some 3700 Eastman Organic Chemicals for science and industry

DISTILLATION PRODUCTS INDUSTRIES
is a division of
EASTMAN KODAK COMPANY

CHEMIRAD® CATIONICS
POLYMERIZED QUATERNIZED ETHYLENE IMINES
Varying cationic intensity with pH range 5-10.

ETHYLENE IMINE MONOMER
(inhibited)
High Purity—b.p. range 55° to 57° C.
Commercially Pure—b.p. range 54° to 61° C.

CHEMIRAD CORPORATION
P. O. Box 96, Milltown, New Jersey
CHarter 6-0323
Manufacturers of Ethylene Imines

Only Procter & Gamble supplies GLYCERINE from 9 plants across America!

Producing a steadily increasing supply of natural GLYCERINE to fill your needs.

FOR INFORMATION WRITE:
Procter & Gamble, Cincinnati 1, Ohio
or 640 Fifth Avenue, N. Y. 19, N. Y.

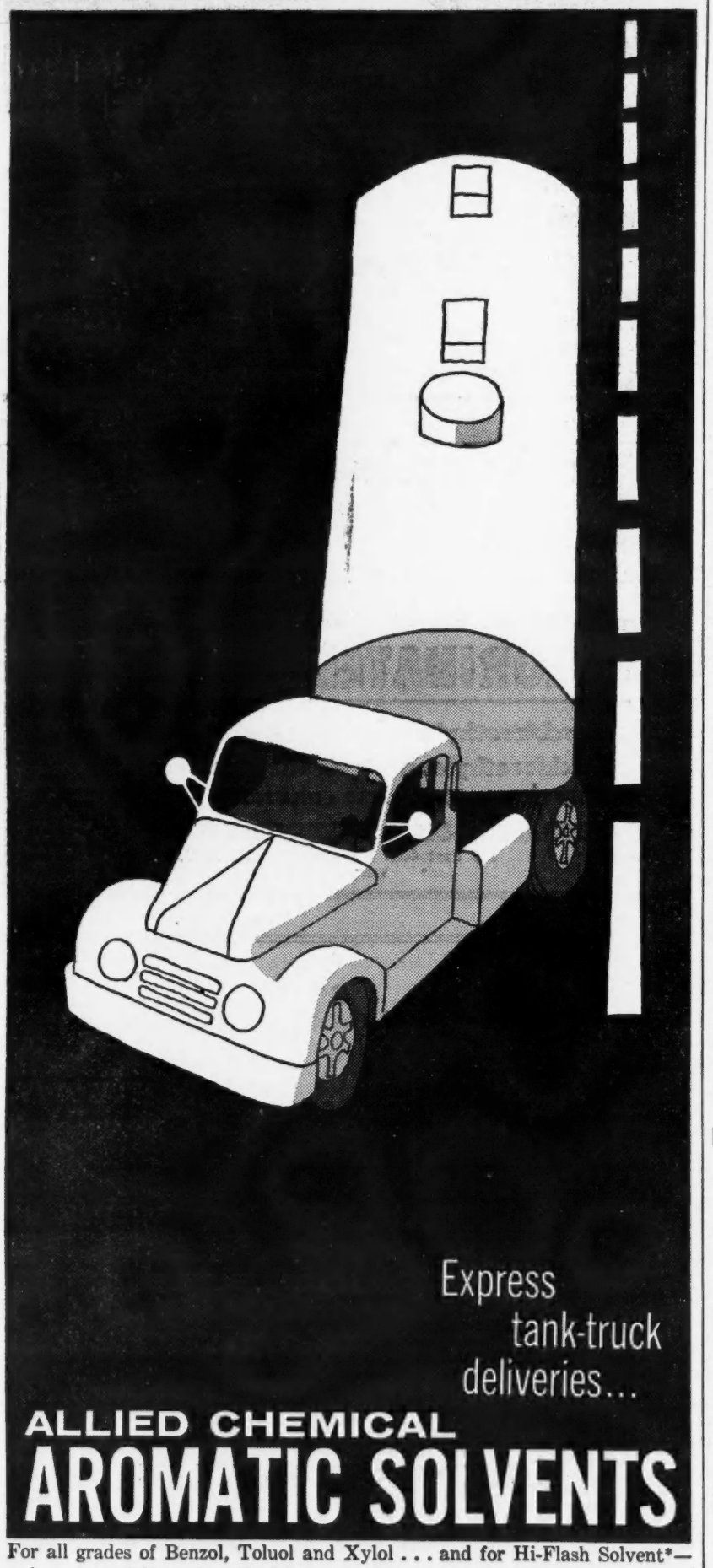
LEVER BROTHERS COMPANY
Producers and Refiners of
NATURAL GLYCERINE
390 Park Avenue New York 22, N. Y.

CHLORINATED SOLVENTS
Perchlorethylene • Methylene Chloride
Trichlorethylene • Carbon Tetrachloride
IMPORTED FROM WESTERN EUROPE • BULK STOCKS AT ELIZABETH, N. J.
INTERNATIONAL PETROSOLVENTS, INC.
155 East 44th St., New York 17, N. Y.
Tel: YU 6-6464

GULF®
ISOOCTYL ALCOHOL
Highest quality and uniformity.
Immediate delivery.
Write or phone.
PETROCHEMICALS DEPARTMENT SALES OFFICE, Gulf Oil Corporation
360 Lexington Ave., New York 17, N. Y. • **QUALITY CHEMICALS** *from* **PETROLEUM**

PHENOL
(U.S.P. Synthetic)
AND
ACETONE
now available in tank cars
and tank trucks
at Gibbstown, New Jersey

Naval Stores Department
HERCULES POWDER COMPANY
INCORPORATED
900 Market St., Wilmington 99, Del.



For all grades of Benzol, Toluol and Xylol . . . and for Hi-Flash Solvent*—order express delivery by Allied Chemical tank truck. Our basic position assures you a stable supply of solvents of high reliability. Phone our nearest office for immediate service.

Boston.....DAvenport 2-7460	Los Angeles . RAymond 3-1371
Buffalo.....DElaware 3600	Newark.....MItchell 2-0960
Chicago.....MIchigan 2-1800	New York....HAnover 2-7300
Cleveland...HEnderson 2-2020	Philadelphia..JEfferson 3-3000
Detroit.....VInewood 2-4400	St. Louis.....PLateau 2-2572
Indianapolis...CLifford 5-5443	

*Hi-Flash Solvent available from all stations except Buffalo and Indianapolis.

PLASTICS AND COAL CHEMICALS DIVISION
40 Rector Street, New York 6, N. Y.

Allied Chemical

Coal Chemicals

Cokeoven operators are moving benzene stocks again after a four month dry spell. Available material is being shipped to contract customers. The market is expected to continue in a light supply position well into the first half of next year. Petroleum sources are expected to keep turning out benzene at top rates for the next six months. Although sources feel the benzene price is too low, they see little chance of an increase at the end of this year. Setbacks in raising the steel operating rate have occurred about as expected. However, the industry was making a good recovery. From a production standpoint, finished steel products are marking time while waiting for semi-finished goods to catch up. Estimated operating rate was about 80 percent for last week.

First shipment of naphthalene from some cokeoven sources is expected by the beginning of this week. Although full capacity is not expected to be reached before the latter part of December, the first step in filling the pipeline comes as a welcome relief to phthalic anhydride producers. Some phthalic plants have had to shut down or operate sporadically as o-xylene or naphthalene became available. Full production of phthalic is not expected before the end of the year.

A basic producer will expand its styrene monomer production capacity by 200 million pounds during the next two years. Current industry capacity is estimated at 1.5 billion pounds and '59 output could reach 1.3 billion pounds.

The American Iron and Steel Institute estimated production of raw steel in October at 1,685,000 net tons of ingots and steel for castings. Output in the previous month was 1,535,017 tons and in October, 1958, the total was 8,839,788 net tons. Steelmaking furnaces made 74,164,626 net tons of steel in the first ten months of this year as compared with 67,975,045 tons in the January through October period last year. Facilities were utilized during this period at an average rate of 60.3 percent.

The Institute estimated that steel production in the week ended November 22 would amount to 78.9 percent of theoretical capacity equivalent to 2,223,000 net tons of steel. Output in the week previous was 1,291,000 tons, 371,000 in the comparable week one month ago, and 2,000,000 net tons in the corresponding week one year ago.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 21, 1958
118.45	118.45	118.47	118.50

For Current Prices see page 10

Basic Products

Benzene—Cokeoven operators are moving their benzene stocks to supply contract customers. Needless to say no spot sales are reported. In fact, veteran observers feel the market will remain snug well into the first half of 1960. Petroleum sources are expected to run strong for at least six months.

Although some setbacks have materialized in the form of oven repairs, this was expected. In addition, steel companies have not been able to build the inventories they would like before beginning to supply the market. However, the industry was making a remarkable recovery, operating rate having jumped to about 45% in the first full week of production and estimated output for last week reported at 78.9 percent.

New car sales continued to reflect the strike. Sales in the first ten days of November were down 17.6 percent over the comparable ten-day period last month.

The Bureau of Mines reported cokeoven production of benzene during September amounted to 2.2 million gallons as against 2.4 million in the previous month and 9.9 million in the comparable month last year. Output in the first nine months of this year was 89.5 million gallons as compared with 71.2 million in the comparable period of last year.

Benzene sales in the ten month period this year ran to 94 million gallons as against 82.9 million in the corresponding period last year, the Bureau said.

Coaltar—Crude coaltar production in the month of September amounted to 17,209,127 gallons as against 16,792,062 gallons in the previous month and 55,345,600 gallons in September last year. Output for the first nine months of this year totaled 491,476,007 gallons as compared with 473,490,000 gallons in the nine month period last year.

September sales of crude coaltar were 10,936,939 gallons as against 10,639,890 gallons in the previous month and 31,587,300 gallons in September last year. Sales for the January through September period this year were 233,285,900 gallons as opposed to a total of 249,590,100 gallons in the nine-month period last year.

Stocks on hand at the close of September amounted to 19,161,557 gallons as opposed to 17,786,218 gallons at the beginning of the month and 26,594,457 gallons at the close of September of last year.

Creosote—Producers feel they may have regained some of the ground lost last year when volume of creosote used in wood treating declined 19%. Prospects for the balance of the year are routine. Railroads have remained out of the market and it is felt unlikely that they will embark on any extensive programs, due to unsettled labor conditions.

Pricewise, the market is firm at 24c. per gallon and expected to remain steady. Although there was no shortage of creosote during the four-month steel strike, a heavy pressure of oversupply has been lessened, it is reported.

Cresylic Acid—There has been no change in the status quo in this market. Producers maintained adequate inventories throughout the strike period and this has been reflected in buying patterns. Sources have continued to report routine withdrawals.

Naphthalene—Shipment of naphthalene from some cokeoven sources is expected by the first part of this week. Although full capacity is not expected to be reached before the middle or latter part of December, the first step in filling the pipelines comes as welcome news to phthalic anhydride producers.

Some plants have had to shut down completely or operate sporadically as o-xylene or naphthalene become available. Of course some producers maintained a better position than others, but the overall market has been critically undersupplied for many weeks. Thus, naphthalene shipments for many weeks will fill immediate needs. Then inventories will have to be rebuilt. Assuming the steel strike is settled during the injunction period and delays because of cokeoven repairs are not overly extended, a balanced supply-demand picture cannot be expected for some time. A cold snap in the midwest could slow things somewhat, it is said.

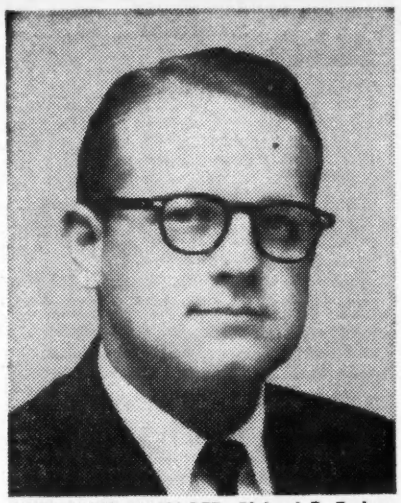
As reported two weeks ago, a petrochemical producer will make 80 degree melting point naphthalene. Market volume of high purity material is estimated at 70-80 million pounds per year.

Phenol—Producers have continued to meet shipping schedules. In this market, as in many others, a pinch in the drum supply has been reported. By use of reconditioned drums and getting consumers to take material in bulk whenever possible, movement of chemicals has been maintained at a steady pace. Price is unchanged at levels in effect since April of this year when synthetic material was reduced 1c. per pound and natural phenol declined ½c. to 1c. per pound.

The supply of natural phenol remains tight and is not expected to improve in the months ahead. In any event, producers have noted some holding back on orders due to the fact that a good slug of phenolics go to industries which utilize steel.

Pyridine—A snug supply in world markets is attributed to the fact that material from the steel industry has been shut off for four months. As a result, suppliers remaining in the market here have noted a heavy influx of orders from overseas consumers.

Domestic supply is adequate for current trade requirements, but material for export has come under allocation. Some foreign suppliers are reported oversold



ASS'T SALES MANAGER: Richard P. Tarbox, appointed assistant sales manager for chemical sales in the plastics and coal chemicals division of Allied Chemical Corporation, New York.

Coal Chemicals

on pyridine and are not offering for export.

The Census Bureau reported imports in the month of September amounting to 11,168 gallons valued at $39,057. Pyridine coming from Britain during the month amounted to 5,514 gallons; Netherlands, 2,629 gallons; Soviet Union, 3,025 gallons.

Dyes

Dyes—Exports of coaltar colors, lakes and toners in September amounted to 225,893 pounds, according to Census bureau report. Export of other dyes and stains totaled 728,543 pounds; sulfur, black, 62,780 pounds and indigo, 660 pounds.

Intermediates

Chloroaniline — Chlorinated and nitrated anilines were reported unchanged in price. These intermediates continue to find use in the production of dyestuffs, antioxidants for rubber, medicinals and petroleum additives.

Methylaniline was dropped 7c.-8c. per pound, while dimethylaniline declined 2c. per pound early this month.

Phenylphenol—Para supply has eased from the tight position reported some weeks ago. Sources report adequate stocks; routine demand.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ended November 22, was as follows:

Ammonia liquor	lbs.	792,492
Ammonium sulfate	lbs.	33,673,986
Benzene	gals.	3,100,453
Coaltar	gals.	18,421,978
Crude chemical oil	gals.	583,941
Toluene	gals.	750,782
Xylene	gals.	222,454

Phthalic Anhydride—Operating rates will rise slowly in the coming weeks, sources report, and full production is not expected before the end of the year.

Although there is believed to have been some duplication of orders, consumers have not been able to get the volume of material they have wanted for several months. On this basis, the phthalic market is expected to remain in a snug supply situation well into the first quarter of 1960.

The extent of recovery in the market will be measured by producers' ability to get more naphthalene. Since the pipelines have been emptied, it will take a while to get up a good head of steam. First shipments of naphthalene from cokeovens are slated for early this week.

Concerning resin chemicals in general, producers have not been able to ship the volume they would have liked for several months. Here, again, business will improve in the balance of the year within the limits to produce under the raw material shortage.

R-Salt—As previously reported, price advanced 10c. per pound across the board. New listing on R-salt, paste, 100 percent basis, is 98c. per pound. Powder, same basis, is newly quoted at $1.08 per pound.

Dioxy R salt was advanced to $2.65 per pound in drum lots. The new price represents a 35c. per pound increase over the previous listing.

Rubber Chemicals—Census bureau, reported exports of accelerators during the month of September amounted to 419,192 pounds. Export of antioxidants totaled 1,102,644 pounds, while other rubber compounding agents accounted for 222,826 pounds.

Styrene Monomer—A basic producer will raise its styrene monomer production capacity by 200 million pounds during the next two years. Current production capacity for the industry is estimated at 1.5 billion pounds, while production this year could reach 1.3 billion pounds.

Observers feel that due to continued brisk demand from outlets to synthetic rubber, molding and extrusion markets, sustained export demand and growing captive needs, expansion in the industry is warranted.

Chemical Hopes for Hypo

—Continued from page 7

to underdeveloped countries be spent for the most part in the United States.

This Treasury-inspired idea, designed to stem the flow of US gold and dollars from this country, is expected to increase American exports by some $65 million to $100 million over a two-year period.

Among the reasons for keeping ICA's non-project procurement policy unchanged, Secretary Herter said, is this:

"It operates to promote private enterprise in the recipient countries and has worked successfully to this end. Private businessmen buy and resell the commodities concerned on a competitive basis.

"This would not be possible if they were required to buy at higher than world prices. A change to US procurement by the ICA would in turn force a change from private to government operation in the distribution of our assistance and so would run directly counter to our endeavor to promote the establishment of free enterprise in the newly developing countries."

Republic Crude Naphthalene

REPUBLIC STEEL

ALSO
XYLOLS Industrial
BENZOLS
TOLUOLS Nitration-Industrial
SULPHATE OF AMMONIA

Specify Republic Steel Containers for your Packaged Items

REPUBLIC STEEL CORPORATION
General Offices • Cleveland 1, Ohio
BRANCH OFFICES IN ALL PRINCIPAL CITIES
Shipping Points: Birmingham, Alabama • Canton, Ohio • Chicago, Illinois
Cleveland, Ohio • Gadsden, Alabama • Massillon, Ohio • Warren, Ohio
Youngstown, Ohio

CRESOLS
Orthocresol and Meta Para Cresol
CRESYLIC ACIDS • XYLENOLS
REINHART Chemical Corporation
CHRYSLER EUILDING, NEW YORK 17 N.Y. • YU 6-7092 • CABLE: RECHEMCORP.

CRESYLIC ACID
DRUMS - CARLOADS
TANK WAGONS - TANK CARS
CONCORD CHEMICAL CO., INC.
Camden, New Jersey WOodlawn 6-1526

OPD
Quickest way to keep current on Chemical Costs

IF IT'S
PHENOL
YOU NEED... YOU CAN DEPEND ON DOW
CALL OUR NEAREST SALES OFFICE OR WRITE THE DOW CHEMICAL COMPANY, MIDLAND, MICHIGAN

FDA Tags 182 Additives as 'Safe' for Food Use

—Continued from page 3

buffers, acidifiers and neutralizers — oleic and linoleic acids.

The fact that these six are not included in the list does not mean that their use in food is prohibited, FDA explains, but that proposed usage must be reviewed for safety under provisions of the food additives law.

Following are the 182 chemicals cleared for use in foods:

CHEMICAL PRESERVATIVES

Ascorbic acid.
Ascorbyl palmitate.
Calcium ascorbate.
Calcium propionate.
Erythorbic acid.
Potassium sorbate.
Proprionic acid.
Sodium ascorbate.
Sodium propionate.
Sodium sorbate.
Sorbic acid.
Tocopherols.

BUFFERS AND NEUTRALIZING AGENTS

Acetic acid.
Aluminum ammonium sulfate.
Aluminum sodium sulfate.
Aluminum potassium sulfate.
Ammonium bicarbonate.
Ammonium carbonate.
Ammonium hydroxide.
Ammonium phosphate (mono- and dibasic).
Calcium carbonate.
Calcium chloride.
Calcium citrate.
Calcium gluconate.
Calcium hydroxide.
Calcium lactate.
Calcium oxide.
Calcium phosphate.
Citric acid.
Lactic acid.
Magnesium carbonate.
Magnesium oxide.
Oleic acid.
Potassium acid tartrate.
Potassium bicarbonate.
Potassium carbonate.
Potassium citrate.
Potassium hydroxide.
Sodium acetate.
Sodium acid pyrophosphate.
Sodium aluminum phosphate.
Sodium bicarbonate.
Sodium carbonate.
Sodium citrate.
Sodium hydroxide.
Sodium phosphate (mono-, di-, tri-).
Sodium potassium tartrate.
Sodium sesquicarbonate.
Sulfuric acid.
Tartaric acid.

EMULSIFYING AGENTS

Diacetyl tartaric acid esters of mono-and diglycerides from the glycerolysis of edible fats or oils.

Mono- and diglycerides from the glycerolysis of edible fats or oils.

Monosodium phosphate derivatives of mono- and diglycerides from the glycerolysis of edible fats or oils.

Propylene glycol.

MISCELLANEOUS

Acetic acid.
Aluminum sodium sulfate.
Aluminum sulfate.
Butane.
Calcium phosphate, tribasic.
Caramel.
Carbon dioxide.
Carnauba wax.
Citric acid.
Glycerine.
Glycerol monostearate.
Helium.
Magnesium carbonate.
Magnesium hydroxide.
Monoammonium glutamate.
Nitrogen.
Papain.
Propane.
Propylene glycol.
Triasetin (glyceryl triacetate).
Tricalcium phosphate.
Sodium carbonate.
Sodium phosphate.
Sodium tripolyphosphate.

NON-NUTRITIVE SWEETENERS

Calcium cyclohexyl sulfamate.
Calcium saccharin.
Saccharin.
Sodium cyclohexyl sulfamate.
Sodium saccharin.

NUTRIENTS

Ascorbic acid.
Calcium carbonate.
Calcium oxide.
Calcium pantothenate.
Calcium phosphate (mono-, di-, tribasic).
Calcium sulfate.
Carotene.
Ferric phosphate.
Ferric pyrophosphate.
Ferric sodium pyrophosphate.
Ferrous sulfate.
Iron reduced.
1-Lysine monohydrochloride.
Niacin.
Niacinamide.
O-Pantothenyl alcohol.
Potassium chloride.
Pyridoxine hydrochloride.
Riboflavin.
Riboflavin-5-phosphate.
Sodium pantothenate.
Sodium phosphate (mono-, di-, tribasic).
Thiamine hydrochloride.
Thiamine mononitrate.
Tocopherols.
a-Tocopherol acetate.
Vitamin A.
Vitamin A acetate.
Vitamin A palmitate.
Vitamin B_{12}.
Vitamin D_2.
Vitamin D_3.

SEQUESTRANTS

Calcium acetate.
Calcium chloride.
Calcium citrate.
Calcium diacetate.
Calcium gluconate.
Calcium hexametaphosphate.
Calcium phytate.
Citric acid.
Dipotassium phosphate.
Disodium phosphate.
Monocalcium acid phosphate.
Monoisopropyl citrate.
Potassium citrate.
Sodium acid phosphate.
Sodium citrate.
Sodium diacetate.
Sodium gluconate.
Sodium hexametaphosphate.
Sodium metaphosphate.
Sodium phosphate (mono-, di-, tribasic).
Sodium potassium tartrate.
Sodium pyrophosphate.
Sodium tartrate.
Sodium tetrapyrophosphate.
Sodium tripolyphosphate.
Tartaric acid.

STABILIZERS

Agar-agar.
Carob bean (locust bean gum).
Carrageheen.
Guar gum.

The following products—listed with their tolerances and uses—also require no FDA testing:

ANTI-CAKING AGENTS

Aluminum calcium silicate, 2 percent, in table salt.
Calcium silicate, 5 percent, in baking powder.
Calcium silicate, 2 percent, in table salt.
Magnesium silicate, 2 percent, in table salt.
Tricalcium silicate, 2 percent, in table salt.

CHEMICAL PRESERVATIVES

Benzoic acid, 0.1 percent. No special use specified.

Butylated hydroxyanisole, total content of antioxidants not over 0.02 percent of fat or oil content, including essential (volatile) oil content, of food. No special use specified.

Butylated hydroxytoluene, same as above.

Caprylic acid, no tolerance listed, in cheese wraps.

Dilauryl thiodipropionate, total content of antioxidants not over 0.02 percent of fat or oil content, including essential (volatile) oil content of the food. No special use specified.

Gum guaiac, 0.1 percent (equivalent antioxidant activity 0.01 percent), in edible fats or oils.

Nordihydroguairetic acid, total content of antioxidants not over 0.02 percent of fat or oil content, including essential (volatile) oil content of the food. No special use specified.

Potassium bisulfite, no tolerance listed, not in meats or in food recognizable as a source of vitamin B_1.

Potassium metabisulfite, same as above.

Propyl gallate, total content of antioxidants not over 0.02 percent of fat or oil content, including essential (volatile) oil content of the food. No special use specified.

Sodium benzoate, 0.1 percent. No special use specified.

Sodium bisulfite, no tolerance listed, not in meats or in foods recognizable as a source of vitamin B^1.

Sodium metabisulfite, same as above.

Sodium sulfite, same as above.

Sodium dioxide, same as above.

Thiodipropionic acid, total content of antioxidants not over 0.02 percent of fat or oil content, including essential (volatile) oil content of the food. No special use specified.

EMULSIFYING AGENTS

Cholic acid, 0.1 percent, in dried egg whites.
Desoxycholic acid, same as above.
Glycocholic acid, same as above.
Ox bile extract, same as above.
Taurocholic acid (or its sodium salt), same as above.

MISCELLANEOUS

Caffeine, 0.02 percent, in cola type beverages.

Ethyl formate, 0.0015 percent, as a fumigant for cashew nuts.

Magnesium stearate, no tolerance listed, as a migratory substance from packaging materials when used as a stabilizer.

Sorbitol, 7.0 percent, in foods for special dietary use.

Triethyl citrate, 0.25 percent, in egg whites.

NUTRIENTS

Copper gluconate, 0.005 percent. No special use specified.

Cuprous iodide, 0.01 percent, in table salt as a source of dietary iodine.

Potassium iodide, same as above.

SEQUESTRANTS

Isopropyl citrate, 0.02 percent. No special use specified.

Sodium thiosulfate, 0.1 percent, in salt.

Stearyl citrate, 0.15 percent. No special use specified.

HIGH PURITY
cresylics
FOR YOU!
...this brochure on
high purity CRESYLICS
Just published, this useful literature is complete with product descriptions, specifications, and suggested uses. One or more of Pitt-Consol's phenols, cresols or cresylic acids may lead you to reduced costs, improved production, new products.
For immediate reference consult our insert in Chemical Materials Catalog...To obtain your personal copy write us today.
PITT-CONSOL
Chemical Company
191 DOREMUS AVE. • NEWARK 5, N. J.
A subsidiary of Consolidation Coal Company

ORONITE®

PHTHALIC ANHYDRIDE

High quality.

Quick delivery in molten or flake form.

Warehoused at key consuming points throughout U. S.

ISOPHTHALIC

Oronite is the original and most experienced producer of isophthalic.

Standard of quality in alkyd and polyester resin manufacture.

In 50 lb. bags. White, free-flowing.

Warehoused at key consuming points throughout U. S.

ORONITE CHEMICAL COMPANY
A CALIFORNIA CHEMICAL COMPANY SUBSIDIARY
EXECUTIVE OFFICES • 200 Bush Street, San Francisco 20, California
SALES OFFICES • New York, Boston, Wilmington, Chicago, Houston, Cincinnati, Cleveland, Tulsa, Los Angeles, San Francisco, Seattle
Foreign Affiliate: California Chemical International, Inc., San Francisco, Geneva, Panama
8552

IMPORTS at United States Ports

New York

AGAR—130 bgs, Meer Corp, Casablanca
60 bbls, Vigo
ALDEHYDE—8 cks, Havre
ALUMINUM POWDER—24 dms, H Solodow, Bremen
ALUMINUM SULFATE—220 bgs, Ferro Metal & Chemical Corp, Rotterdam
AMINOACETIC ACID—22 dms, Rotterdam
50 dms, Antwerp
AMMONIUM BICARBONATE—400 bgs, Chemical Manufacturing Co, Liverpoool
AMMONIUM CARBONATE—50 dms, Rotterdam
AMMONIUM CHLORIDE—200 bgs, Chemical Manufacturing Co, Liverpool
AMMONIUM PHOSPHATE, MONOBASIC—70 bgs, Liverpool
ANILINE DYES—39 dms, Geigy Chemical Corp, Bremerhaven
17 dms, Carbic Color & Chemical Co, Rotterdam
20 dms, H Bruckmann & Lorbacher, Hamburg
11 dms, H Bruckmann & Lorbacher, Bremen
16 dms, Arondy Corp, Liverpool
10 dms, Dye Specialties Inc, Liverpool
5 dms, Heemsoth Kerner, Liverpool
28 dms, Sandoz Inc, Havre
74 dms, Havre
ANNATTO SEED—32 bgs, Foreign Domestic Distributors, Callao
193 bgs, Callao
200 bgs, Cabedelo
ANTHRAQUINONE—91 dms, Francolor Inc, Havre
ANTIMONY—7 dms, C P Hull, Hull
ANTIMONY OXIDE—500 bgs, Liverpool
760 bgs, Antwerp
498 bgs, Hull
ANTIMONY REGULUS—250 cs C Tennant Sons & Co, Havre
443 cs, Rijeka
94 bbls, Antwerp
ARSENIC, METALLIC—60 dms, C Tennant Sons & Co, Avonmouth
13 dms, Amplex Chemical Co, Gothenburg
ARSENIC, RED—10 dms, Indussa Corp, Antwerp
ASBESTOS FIBER—1,000 bgs, Mundet Cork Corp, Lourenco Marques
600 bgs, N American Asbestos Corp, Lourenco Marques
3,500 bgs, Johns Manville Corp, Lourenco Marques
400 bgs, Davies Turner & Co, Durban
1,000 bgs, Johns Manville Corp, Port Elizabeth
300 bgs, Keasby & Mattison, Liverpool
BALSAM—10 cs, Fritzsche Bros, Barranquilla
5 dms, Wessel Dunval & Co, La Libertad
BASIL LEAVES—45 bls, Louis Furth, Marseille
BEESWAX — 10 bgs, International Commodities Corp, Valparaiso
35 bbls, Gillespie & Co, Cap Haitien
515 bgs, Marine Midland Trust Co, Lisbon
100 bgs, H H Pike & Co, Rio de Janeiro
32 bgs, Machado & Co, Ciudad Trujillo
138 bgs, Koster Keunen, Casablanca
33 bgs, Havana
BENZOIN GUM—27 cs, Meer Corp, Bangkok
17 cs, Olson Importing Corp, Bangkok
12 cs, Centflor Manufacturing Co, Bangkok
20 cs, Bangkok
BERBERIS ROOT—10 bls, S B Penick & Co, Rijeka
BERGAMOT OIL—4 cs, J Manheimer, London
40 cs, Messina
BOIS DE ROSE OIL—10 dms, Northam Trading Co, Callao
20 dms, Belem-Para
BONE—641 bgs, A M Goldstein, Santos
189 bgs, International Packers Ltd, Santos
BRILLIANT GREEN—2 dms, American Dyewood Co, Genoa
2 dms, American Dyewood Co, London
BRONZE POWDER—30 dms, Allied Manufacturing Co, Hamburg
10 dms, Embossograph Process Co, Hamburg
CALCIUM CARBIDE—1 dm, Dixon International Inc, Rijeka
CALCIUM CARBONATE—1,000 bgs, Smith Chemical & Color Co, Hull
1,200 bgs, Antwerp
CALCIUM CARBONATE, PRECIPITATED — 500 bgs, H J Baker & Bro, Avonmouth
CANDELILLA WAX—250 bgs, M Argueso & Co, Tampico
188 bgs, Smith & Nichols, Tampico
626 bgs, Tampico
CAPRIC ACID—75 dms, Banta Corp, Oslo
CARAWAY SEED—100 bgs, Frank Tea & Spice Co, Rotterdam
300 bgs, Levy & Levis Co, Rotterdam
100 bgs, M J Golombeck, Rotterdam
450 bgs, R J Spitz, Rotterdam
100 bls, Ideal Trading Corp, Rotterdam
200 bgs, Rotterdam
CARBON, DECOLORIZING—6 bgs, L A Salomon & Bro, Rotterdam
CARDAMOM—7 cs, A G Beckman, London
CARNAUBA WAX—500 bgs, N American Cocoa Trading Co, Salvador
189 bgs, Wm Diehl & Co, Natal
104 bgs, M Argueso & Co, Parnahiba
63 bgs, Frank B Ross, Parnahiba
188 bgs, Cornelius Wax Refining Corp, Parnahiba
125 bgs, Smith & Nichols, Parnahiba
376 bgs, F Henjes, Parnahiba
63 bgs, Wm Diehl & Co, Parnahiba
188 bgs, Parnahiba
CASEIN—182 bgs, National Casein Sales, Santos
1,000 bgs, Borden Chemical Co, Montevideo
100 bgs, F H Paul & Stein Bros, Rotterdam
500 bgs, Paul A Dunkel, Buenos Aires
1,500 bgs, Eugenio Lang, Buenos Aires
100 bgs, First Spice Co, Rotterdam
400 bgs, Rotterdam
617 bgs, Hamburg
CASHEWNUT SHELL LIQUID—25 dms, Brazil Oiticica Inc, Fortaleza
CASSIA—160 bgs, C M Van Sillevoldt, Singapore
1,162 bls, Ludwig Mueller, Rotterdam
454 bls, East India Trading Co, Rotterdam
686 bls, Rotterdam
CASTOR OIL—300 tons, Wallace & Tierman, Santos
300 tons, Salvador
240 tons, Recife
571 tons, Calcutta
CELERY SEED—84 bgs, Otto Gerdau, Marseille
174 bgs, Otto Gerdau, Bombay
84 bgs, K H Landes & Co, Marseille
CETYL BROMIDE—5 dms, Heemsoth Kerner, Liverpool
CHARCOAL, ANIMAL—1,000 bgs, Mincing Trading Corp, Glasgow
CHARCOAL, BONE—505 bgs, Lisbon
CHESTNUT EXTRACT—1,200 bgs, Naples
CLAY, BALL—1,350 bgs, United Clay Mines Corp, Avonmouth
CLAY, CHINA—898 bgs, Anglo American Clays Corp, Avonmouth
CHLORINATED RUBBER—610 bgs, Chemical Manufacturing Co, Liverpool
CLOVE—112 bgs, Chase Manhattan Bank, Zanzibar
100 bgs, M J Golombeck, Tamatave
210 bgs, Mincing Trading Corp, Tamatave
200 bgs, K H Landes & Co, Tamatave
110 bgs, L A Champon & Co, Tamatave
100 bgs, Delano Corp of America, Tamatave
500 bgs, Tamatave
490 bgs, Zanzibar
CLOVE OIL—25 dms, George Uhe Co, Tamatave
29 dms, Givaudan Corp, Tamatave
10 dms, Tamatave
CLOVE LEAF OIL—104 dms, L A Champon & Co, Tamatave
12 dms, Magnus Mabee & Reynard, Tamatave
COBALT CHLORIDE—20 dms, Hamburg
COBALT OXIDE—120 cks, Antwerp
COBALT POWDER—45 dms, C Hardy, Havre
COBALT SULFATE—220 dms, Advance International Ltd, London
COPPER CYANIDE—230 dms, Chemical Manufacturing Co, Liverpool
CORIANDER SEED—840 bgs, Wm E Martin & Sons, Casablanca
200 bgs, Casablanca
CORN STARCH—400 bgs, Geismar & Co, Antwerp
204 bgs, Impex Agricultural Products, Rijeka
764 bgs, Rotterdam
800 bgs, Antwerp
CRESYLIC ACID—162 dms, Van Oppen & Co, Manchester
176 dms, Van Oppen & Co, Liverpool
25 tons, Van Oppen & Co, Liverpool
85 dms, M W Hardy & Co, Avonmouth
37 dms, Van Oppen & Co, Avonmouth
CUBE POWDER—602 bgs, Foreign Domestic Distributors, Callao
CUMIN SEED—100 bgs, Alicante
CYSTEINE HYDROCHLORIDE—2 dms, Bremen
DAMMAR GUM—35 bgs, Archer Daniels Midland Co, Singapore
DEGRAS—5 dms, James E Fox, Genoa
50 dms, N I Malmstrom, Manchester
6 dms, Olympic Shipping Co, Liverpool
27 dms, Ovimpex Inc, Antwerp
100 dms, Gallard Schlesinger, Bremen
50 dms, Overseas Trading Corp, Liverpool
109 dms, Port Adelaide
DEXTRIN—340 bgs, Stein Hall & Co, Rotterdam
400 bgs, Morgan Guaranty Trust Co, Rotterdam
1,000 bgs, Rotterdam
DIMETHYL SULFOXIDE—1 dm, Hull
DINITRILE AZOBUTYRATE—52 dms, Madison Drug Corp, Havre
DYES, COALTAR—34 dms, Orlex Dyes & Chemical Corp, Hamburg
37 dms, Caldwell & Co, Hamburg
2 dms, Verona Dyestuffs, Hamburg
35 dms, H Bruckmann & Lorbacher, Hamburg
20 dms, C A Haynes, Rotterdam
EARTH COLORS—135 bgs, T H Deutz, Bremen
FENUGREEK SEED—125 bgs, Casablanca
FISHLIVER OIL—5 dms, Chase Manhattan Bank, Yokohama
3 dms, Kanematsu N Y Inc, Yokohama
FUEL OIL—100,965 bbls, Hess Inc, Punta Cardon
519,466 bbls, Esso Standard Oil Co, Aruba
112,455 bbls, Metropolitan Petroleum Corp, Puerto La Cruz
239,746 bbls, Esso Standard Oil Co, Caripito
158,687 bbls, Esso Standard Oil Co, Las Piedras
112,488 bbls, Tampico
FUMARIC ACID—28 dms, J Fox, London
GALL—4 dms, International Packers Ltd, Gladstone
8 dms, Wilson & Co, Port Adelaide
GELATIN—100 bgs, H Bruckmann & Lorbacher, Rotterdam
102 bgs, Franco Belgian Corp, London
200 bgs, T M Duche & Sons, London
200 dms, Franco Belgian Corp, London
60 bgs, Duche Uni Gum Co, Havre
130 bgs, Arles Co, Havre
18 dms, D H Burdett, Avonmouth
200 bgs, Commercial Bank of N America, Hamburg
700 bgs, Antwerp
GERMANIUM DIOXIDE—400 cs, American Metal Climax, Antwerp
GLUE—50 bgs, Jung Forwarding Co, Liverpool
15 bgs, B Young, London
150 bgs, Jung Forwarding Co, Avonmouth
371 cs, Henneux Co, Hamburg
102 cks, M Corbett, Marseille
1,500 bgs, First National Boston, Hamburg
GLUE STOCK—348 bls, Barranquilla
GLYCERINE—83 dms, R P Casado, Havana
GRAPHITE—500 bgs, Asbury Graphite Mills, Tamatave
250 bgs, C Pettinos, Tamatave
250 bgs, J E Potter, Tamatave
180 bgs, Joseph Dixon Crucible Co, Tamatave
GUAIACWOOD OIL—93 cs, Fritzsche Bros, Asuncion
GUAR GUM—20 bgs, Paul A Dunkel, Rotterdam
GYPSUM—800 bgs, C B Chrystal, Hull
GYPSUM, CRUDE—20,120 tons, U S Gypsum Co, Hantsport
HOOF & HORNMEAL—2,238 bgs, A M Goldstein, Buenos Aires
HYDROFLUORIC ACID—61 dms, Liverpool
ICHTHAMMOL—5 dms, Chas L Huisking & Co, Hamburg
IPECAC ROOT—66 bgs, S B Penick & Co, Port Limon
10 bgs, H Weber & Co, Cristobal
IRON OXIDE—123 dms, Hudson Shipping Co, Oslo
ISONIAZID—20 dms, Hamburg
JUNIPER BERRIES—395 bgs, Meer Corp, Rijeka
KARAYA GUM—61 bgs, Paul A Dunkel, Bombay
LABDANUM GUM—2 dms, Noville Essential Oil Co, Cadiz
LEAD, RED—184 dms, Eagle Picher Co, Tampico
LEAD, WHITE—200 bgs, Rotterdam
LACTIC ACID—28 djns, E F Drew & Co, Hamburg
50 dms, A Millner & Co, Liverpool
LAVANDIN OIL—18 cks, Tombarel Products Co, Cannes
38 cks, Brown Bros, Cannes
LEMON OIL—2 dms, Ungerer & Co, Vera Cruz
LEMONGRASS OIL—11 dms, George Uhe Co, Cochin
29 dms, Volkart Bros, Cochin
18 dms, Cochin
LICORICE ROOT—247 bls, Meer Corp, Piraeus
LIME OIL—1 dm, L A Champon & Co, Port Au Prince
LINDANE—136 dms, Hamburg
LOCUST BEAN—100 bgs, Norwalk Mills, Piraeus
222 bgs, Meer Corp, Piraeus
111 bgs, M J Golombeck, Piraeus
MAGNESIUM CARBONATE—1,400 bgs, Reheis Co, Liverpool
51 cs, Chas L Huisking & Co, Genoa
MANDARIN OIL—2 cs, Messina
MARJORAM LEAVES—171 bls, Louis Furth, Marseille
100 bgs, H Marmorek & Son, Marseille
MENTHOL—50 cs, Marklin Chemical Corp, Santos
MERCURY—400 flks, Cadiz
100 bils, Istanbul
MINERAL COLORS—382 bgs, Revelli Chemicals inc, Hamburg
MINERAL WAX—240 bgs, Strohmeyer & Arpe, Hamburg
MOLASSES—555 tons, W R Grace & Co, Salaverry
MUSTARD SEED—500 bgs, Louis Furth, Copenhagen
450 bgs, C Gulden, London
MYRRH GUM—29 bgs, F D Keller & Sons, Aden
NAPHTHALENE—639 bgs, Standard Naphthalene Products Co, Hull
675 bgs, Witco Chemical Co, Hull
1,068 bgs, J N Forker, Middlesbrough
1,506 bgs, J N Forker, Liverpool
3,394 bgs, Witco Chemical Co, Liverpool
470 bgs, Antwerp
NAPHTHOL—5 dms, Wedeman & Godknecht, Bremen
b-NAPHTHOL—330 bgs, Caldwell & Co, Rotterdam
NICOTINE—4 dms, European Chemical Co, Liverpool
NICOTINE SULFATE—10 dms, Liverpool
NUTMEG—68 bgs, East India Trading Co, Hamburg
250 bgs, R D Webb & Co, Rotterdam
250 bgs, Lo Curto & Funk, Rotterdam
50 bgs, Dodge & Olcott, Rotterdam
30 bgs, P H Petry, Singapore
OCOTEA CYMBARUM OIL—23 dms, Lo Curto & Funk, Itajai
OLEYL ALCOHOL—20 dms, Olympic Shipping Co, Liverpool
OLIVE OIL—50 dms, Irving Trust Co, Malaga
OPIUM—300 chts, Calcutta
ORANGE PEEL—830 bgs, S B Penick & Co, Cap Haitien
OREGANO LEAVES—380 bgs, M J Golombeck, Piraeus
OURICURY WAX—120 bgs, M Schmidt, Salvador
566 bgs, Frank B Ross, Salvador
OX BILE—4 dms, Wilson & Co, Santos
PALMKERNEL OIL—268 cs, B M T Commodity Corp, Rotterdam
200 tons, Rotterdam
PALM OIL, HYDROGENATED—3 dms, H C Brill, London
PAPAIN—140 cs, Chas L Huisking & Co, Mombasa
30 cs, Balfour Guthrie, Mombasa
100 cs, National City Bank, Mombasa
PAPRIKA—1,701 bgs, Polak Trading Co, Casablanca
100 bgs, M J Golombeck, Piraeus
50 bgs, J Raphael, Hamburg
200 bgs, Hamburg
100 bgs, H Schlichting, Alicante
75 bgs, P H Petry, Alicante
800 bgs, A A Sayia, Alicante
200 bgs, Gallagher & Ascher, Alicante
466 bgs, Alicante
PAPRIKA EXTRACT—57 cs, Alicante
10 dms, Alicante
PATCHOULI OIL—10 cs, Kane Import Corp, Penang
PEATMOSS—1,000 bls, Premier Peatmoss Corp, Gdynia
500 bls, New Amsterdam Import Co, Aarhus
PECTIN—36 dms, T M Duche & Sons, Copenhagen
PEPPER, BLACK—160 bgs, C Czarinkow, Cochin
200 bgs, Cochin
PEPPER, RED—200 bgs, Tokyo Food Products, Kobe
100 bls, California Commodities Corp, Kobe
100 bgs, M J Golombeck, Kobe
30 bgs, Zanzibar
PEPPER, WHITE—100 bgs, East India Trading Co, Belem-Para
102 bgs, East India Trading Co, Hamburg
140 bgs, Singapore
PETITGRAIN OIL—6 dms, Swiss Credit Bank, Asuncion
PETROLEUM, CRUDE—154,542 bbls, Pure Oil Co, Maracaibo
118,243 bbls, Hess Inc, Punta Cardon
259,078 bbls, California Oil Co, Rastanura
191,159 bbls, Mobil Oil Co, Puerto La Cruz
PHOSPHORIC ACID—3 dms, Monsanto Chemical Co, Genoa
PHTHALIC ACID—100 bgs, Caldwell & Co, Rotterdam
PHTHALIC ANHYDRIDE—400 bgs, Hudson Shipping Co, Antwerp
1,667 bgs, Amerford International Corp, Hamburg
200 bgs, Baird Chemical Corp, Dunkirk
1,000 bgs, International Chemical Corp, Havre
300 bgs, Hudson Shipping Co, Genoa
400 bgs, Rotterdam
1,049 bgs, Antwerp
a-PICOLINE—100 dms, Van Oppen & Co, Avonmouth
139 dms, G A Abood Co, Rotterdam
PINENEEDLE OIL—1 dm, Hartog Trading Corp, Rijeka
POLLACKLIVER OIL—55 dms, Arista Oil Products Co, Yokohama
350 dms, National City Bank, Yokohama
65 dms, Mitsubishi International Corp, Yokohama
POLLACKLIVER OIL, CONCENTRATED—2 dms, Arista Oil Products Co, Yokohama
POLYVINYL ACETATE EMULSION—25 bbls, Lloyd Associates, Bremen
POLYVINYL ALCOHOL—800 bgs, Marubeni Iida Inc, Kobe
POLYVINYL CHLORIDE—336 cs, Petal Sales Corp, Bremen
POPPYSEED—200 bgs, Levy & Levis Co, Copenhagen
450 bgs, R J Spitz, Copenhagen
300 bgs, R J Spitz, Rotterdam
150 bgs, Rotterdam
POTASSIUM CYANIDE—80 dms, Chemical Manufacturing Co, Liverpool
POTASSIUM PERCHLORATE—120 dms, Ugine Industries, Havre
POTASSIUM SILICOFLUORIDE—800 bgs, London
POTATO STARCH—100 bgs, B Westergaard & Co, Copenhagen
PYRENE—8 dms, Koppers Co, Rotterdam
PYRITES—359 cks, American Metal Climax, Leixoes
QUEBRACHO EXTRACT—827 bgs, Olson Importing Co, Buenos Aires
1,071 bgs, Ten American Corp, Buenos Aires
1,777 bgs, Tanimex Corp, Buenos Aires
RADIUM ELEMENT—1 cs, Radium Chemical Co, Antwerp
RICE STARCH—380 bgs, Auran Manufacturing Co, Trieste
SACCHARIN—75 dms, Certified Aspirin Co, Yokohama
SAGE LEAVES—82 bls, M J Golombeck, Piraeus
200 bgs, Trieste
100 bls, Split
SALICYLATES—20 dms, D F Young, Gothenburg
SANDARAC GUM—20 bgs, G H Lincks, Genoa
SANDALWOOD OIL—2 cs, Freedman & Slater, London
10 cs, Swiss Credit Bank, Cochin
8 cs, Cochin
SAVORY LEAVES—20 bls, S B Penick & Co, Marseille
SEEDLAC—2,750 bgs, Calcutta
SERPENTINA ROOT—60 bgs, Calcutta
SESAME SEED—333 bgs, American Halvah Products Co, Santos
336 bgs, Levy & Levis Co, Santos
704 bgs, American Halvah Products Co, Cu[illegible]
SESAME SEED, HULLED—220 bgs, Sokol & Co, [illegible]
200 bgs, Levy & Levis Co, San Juan del Sur
600 bgs, R J Spitz, San Juan del Sur
475 bgs, Louis Furth, Corinto
50 bgs, J Bieler, Corinto
1,100 bgs, Archibald & Kendall, Corinto
75 bgs, Ideal Trading Co, Corinto
SHELLAC—50 bgs, Calcutta
SODIUM BICARBONATE—1,000 bgs, Chemical Manufacturing Co, Liverpool
SODIUM CHLORIDE—40 dms, Antwerp
SODIUM CYANIDE—275 dms, Chemical Manufacturing Co, Liverpool
SODIUM-b-GLYCERPHOSPHATE—1 dm, Fisher Scientific Co, London
SODIUM PERBORATE TETRAHYDRATE—600 bgs, Chemical Manufacturing Co, Liverpool
SODIUM SILICOFLUORIDE—450 bgs Copenhagen
STEARYL ALCOHOL—50 bgs, Olympic Shipping Co, Liverpool
TALC—5,185 bgs, Charles Mathieu, Genoa
TAPIOCA FLOUR—648 bgs, Geismar & Co, Bangkok
1,120 bgs, Poons Co, Bangkok
2,200 bgs, American Metagraph Co, Itajai
TETRAALKYLTHIOPYROPHOSPHATE—22 cans, Plant Products Corp, Hamburg
THALLIUM SULFATE—5 cs, European Chemical Co, Hamburg
THEOBROMINE—8 kgs, Frank Samuel & Co, Antwerp
THORIUM OXIDE—5 dms, Heavy Minerals Co, Havre
THYME LEAVES—64 bgs, Wm E Martin & Sons, Marseille
48 bls, Seeck & Kade, Marseille
298 bgs, Alicante
THYROID POWDER—11 dms, Cosmos Shipping Co, Buenos Aires
TITANIUM DIOXIDE, RUTILE—440 bgs, Havre
TOLU BALSAM—25 cs, Barranquilla
TRAGACANTH GUM—93 cs, Am-Iran Corp, Khorramshahr
TRICHLOROETHYLENE — 200 dms, Chemical Manufacturing Co, Liverpool
TUNG OIL—467 dms, Beira
ULTRAMARINE BLUE—120 bgs, Whittaker Clark & Daniels, Hull
VANILLA BEANS—53 cs, Gillespie & Co, Tamatave
30 cs, National City Bank, Tamatave
14 cs, L A Champon & Co, Tamatave
13 cs, Dammen & Co, Tamatave
12 cs, Frank Tea & Spice Co, Tamatave
VANILLA OLEORESIN—9 cs, Madagascar Agencies, Tamatave
WATTLE BARK—1,297 bls, Bowring & Co, Capetown
YLANG YLANG OIL—1 kg, Lo Curto & Funk, Havre
ZINC OXIDE—1,440 bgs, Imperial Color & Paper Corp, Vera Cruz
40 bgs, Pigment & Chemical Co, Hull
2,205 bgs, Havre
600 bgs, London
ZIRCON SAND—8,023 bgs, Lo Curto & Funk, Brisbane

Los Angeles

AMMONIUM CHLORIDE—400 bgs, C M C Chemicals Inc, Liverpool
300 bgs, Amsterdam
BONE FLOUR—2,999 bgs, H M Newhall & Co, Melbourne
CALCIUM CHLORIDE—1,000 bgs, J G Wiley, Hamburg
CALCIUM LACTATE—20 dms, Gauge & Co, Rotterdam
CALCIUM NITRATE—5,000 bgs, Atkins Kroll & Co, Bremen
32,389 bgs, Wilson & Ceo Meyer & Co, Heroya
CARAWAY SEED—100 bgs, B C Ireland, Rotterdam
CARNAUBA WAX—33 bgs, Wm Diehl & Co, Amsterdam

—Continued on page 57

Science for the World's Well-Being

Pfizer

Manufacturing Chemists for Over 100 Years

CHAS. PFIZER & CO., INC.
Chemical Sales Division
630 Flushing Avenue,
Brooklyn 6, N.Y.

Branch Offices: Clifton, N. J.; Chicago, Ill.; San Francisco, Calif.; Vernon, Calif.; Atlanta, Ga.; Dallas, Tex.; Montreal, Canada.

PFIZER L-LYSINE

in prenatal, pediatric, appetite stimulants and geriatric formulations

Diet supplementation with lysine is most necessary during periods of tissue protein replacement. These periods occur normally in infancy, pregnancy, old age and after illness. Pfizer L-Lysine may be easily incorporated into diet supplement formulations to satisfy these higher lysine requirements.

The pharmaceutical industry is finding a profitable market for formulations which combine Pfizer L-Lysine with vitamins and minerals. The combination is readily adaptable to tablets, capsules, powders, syrups and elixirs for—

growth and appetite stimulants—geriatric preparations—pediatric and prenatal products—standard dietary supplements.

Comprehensive data on the profitable inclusion of Pfizer L-Lysine in your multivitamin and mineral products is available on request and Pfizer Technical Service representatives can offer formulation assistance when needed.

Drugs, Fine Chemicals

Sales of antibiotics for human use should hit $440 million in 1965, up from $380 million in 1958, spokesman for a leading drug and fine chemicals maker predicts. Basis for this rosy outlook: expanding population and new research discoveries. These last, of course, include the new synthetic penicillins like "Syncillin" and "Maxipen" which are expected to combat staphylococcus infections and limit considerably the number of allergic reactions, two of the problems for which solutions have long been sought.

Several other new drugs should also pep up antibiotic sales in coming years. These include "Coly-mycin," claimed to be effective against intestinal, eye and ear, and urinary infections, and "Declyomycin," shown by clinical tests to be two to four times more potent than other tetracyclines. And still in the development stage but seen as particularly promising are fervenulin, streptosotocin and aspartocin.

On the price front last week, activity was lacking but discussion of the recent folic acid price reductions provided a bit of news. One leading producer of the vitamin indicated that it had not changed prices in line with a competitor's substantially lower schedule and, in fact, contemplated no action immediately. As for technical neomycin sulfate, which was recently dropped ½ cent per gram, to 13½ cents, the firm said that it might go along with this change but by week's end, there were no indications that it had done so.

The folic acid reduction reported by one producer was a very substantial cut, ranging from 9 cents to 19 cents per gram depending on the size of the order. New listing for 1 to 4.9 kilos, for example, was set at 30 cents per gram, compared with 44 cents per gram quoted earlier—and still quoted by certain of the trade.

Rumors that the price of dihydrostreptomycin was due to be advanced to $45 per kilo appear to be groundless. Market strength is apparent, sources say, but they seriously doubt that the quote will soon, if ever, go to $45. An upturn in requirements for DHS is noted but this is pretty much a seasonal affair.

The market for procaine hydrochloride continues weak with prices reported last week in the vicinity of $2.25 per pound for quantities of 1,000 pounds or more.

Citric Acid—A well-known drug and fine chemicals maker has completed expansion of its citric acid plant. Costing $3.6 million, the additional facilities, completely integrated with the old, increased the firm's productive capacity from 7 million pounds to more than 15 million pounds annually.

With the additional capacity, the firm indicates that it will start concentrating more on the open market. Until now, most of its production has been used captively.

As a clue to the extent of interest in citric acid currently, are reports that two new plants are slated by firms not yet in the business. One of these units is due to rise in New Jersey, the other in Mexico.

An Indian company is also interested in establishing a citric acid plant in India and has called for US participation in the form of complete plant machinery, testing equipment, and technical know-how.

Cream of Tartar — September imports amounted to 387,471 pounds. Of this amount, The United Kingdom supplied 200,000 pounds, Italy 176,448, and Spain 11,023 pounds.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Nov. 21, 1958
60.23	60.23	60.23	62.53

For Current Prices see page 10

Demand is reported moderate, supplies adequate. According to some sources, price stability is indicated.

Dihydrostreptomycin—Rumors that the price of DHS would likely go to $45 per kilo appear to have little basic in fact. True, sources say, stability is more apparent and demand has picked up seasonally. But still they doubt that a $5 jump is likely. Current schedule is $40 per kilo for 50-kilos or more, $41 per kilo for lesser quantities.

Folic Acid—A major producer announced substantially lower prices for folic acid, USP and feed grade, November 9. These, however, had not gone industry-wide by presstime last week. In fact, one producer indicated that it contemplated no action whatsoever, at least immediately.

Under revised schedules, folic is listed at 35c. per gram for ⅓ to 1 kilo, at 30c. per gram for 1 to 4.9 kilos, and at 25c. per gram for 5 kilos or more. These prices compare with the 44c. per gram, 1-kilo or more, listing still adhered to by others in the trade.

New prices for feed grade, 10 percent, folic acid are $35 per kilo for ⅓ to 2.9 kilos, and $30 per kilo for 3 kilos or more.

Neomycin Sulfate—While one producer dropped the price of technical neomycin sulfate ½ cent per gram, to 13½c., November 9, a second had not taken any action by late last week. Spokesman for the firm indicated, however, that it may go along with the new schedule.

The technical form of the antibiotic is used in animal feeds, a market that has been rather slow this fall, reportedly.

Phenylpropanolamine Hydrochloride — A major producer recently (November 15) reduced the price of phenylpropanolamine hydrochloride 50 cents per pound, establishing the 1,000 pound listing at $9.50 per pound. Increased production and improved processing techniques were cited.

The chemical is used in the manufacture of cold remedies.

Procaine Hydrochloride — Market for procaine hydrochloride has grown steadily weaker as witnessed by a recent report that the price has dropped to $2.25 per pound for orders of 1,000 pounds or more.

Too many suppliers, too few major users, it's been said, account for the continually weak market.

Quinine—Imports of quinine sulfate in September totaled 38,082 ounces and came from The Netherlands (23,082 ounces) and West Germany (15,000 ounces).

The same month, the same countries accounted for the 113,617 ounces of quinidine (and salts) received here. The

Drug and Fine Chemical Exports: September

Exports of selected drugs and fine chemicals for the months of August and September, as reported by the Bureau of Census, were as follows:

		September	*August*
Analgesics and antipyretics	lbs.	15,980	21,795
Antibiotics, n.e.c.*	grs.	10,154,171	11,481,531
Ascorbic Acid	lbs.	43,334	35,809
Aspirin	lbs.	73,230	36,980
B-complex (excluding B_1 and B_{12})	lbs.	39,552	45,688
Bacitracin	100-million units	3,846	8,586
Dihydrostreptomycin	gms.	5,723,850	228,687
Pectin and preparations	lbs.	39,695	62,205
Penicillin, bulk	million units	3,397,519	5,695,569
Streptomycin	gms	3,187,250	2,762,879
Sulfa Drugs	lbs.	62,566	50,227
Thiamin	lbs.	4,360	3,225
Vitamin A, bulk and medicinal	lbs.	14,097	6,767
Vitamins, n.e.c.*	lbs.	69,652	79,724

* Not elsewhere classified by the Census bureau.

For Vitamins

send your inquiries to

ROCHE ROUND the WORLD

THE ROCHE COMPANIES:

ARGENTINA:	Productos Roche S.A., Buenos Aires
AUSTRALIA:	Roche Products Pty. Ltd., Sydney
AUSTRIA:	Hoffmann-La Roche Wien GmbH., Wien V/55
BELGIUM:	Produits Roche S.A. Belge, Bruxelles-Midi
BRAZIL:	Produtos Roche S.A., Rio de Janeiro
CANADA:	Hoffmann-La Roche Ltd., St. Laurent, Montreal 9, P. Q.
COLOMBIA:	Productos Roche S.A., Bogotá
CUBA:	Productos Roche S.A., La Habana
ENGLAND:	Roche Products Ltd., London, W.1.
FRANCE:	F. Hoffmann-La Roche & Cie., Paris IVe
GERMANY:	Deutsche Hoffmann-La Roche A.G., Grenzach (Baden)
INDIA:	Roche Products Private Ltd., Bombay 1
ITALY:	Prodotti Roche S.p.A., Milano
JAPAN:	Nippon Roche K.K., Tokyo
MEXICO:	Productos Roche S.A., Mexico 12, D.F.
SOUTH AFRICA:	Roche Products (Pty) Ltd., Johannesburg
SPAIN:	Productos Roche S.A., Madrid
SWEDEN:	Roche-Produkter Aktiebolag, Stockholm
SWITZERLAND:	F. Hoffmann-La Roche & Co. A.G., Basel
TURKEY:	Roche Müstahzarlari Sanayi Ltd., Şirketi, Istanbul
URUGUAY:	Roche International Inc., Montevideo

Roche agencies in other countries

Vitamin Division, **Hoffmann-La Roche Inc.**, Nutley 10, N. J.

CLINTBROOK

CAMPHOR USP & Technical
CAMPHOR TABLETS, *Tower Brand®*
PABA & Salts
PROCAINE Base
PROCAINE HCL
THEOBROMINE SALTS
Acetic Acid
Acetone
Alcohol Prop.
Methanol
Methanol AntiFreeze

CLINTBROOK CHEMICAL COMPANY
division of
CHAS. L. HUISKING & CO., Inc.
417 Fifth Ave., New York 16, N.Y., Phone: ORegon 9-8400. Cables: Huisking, N.Y.
Plant and Warehouse at Lyndhurst, N. J. Chicago Office: 435 No. Michigan Ave.

CLINTBROOK CHEMICALS

ITALIAN
TARTARIC ACID
CREAM OF TARTAR
ROCHELLE SALTS
N. F.
Distributed by
NYLOS TRADING CO., INC.
21 West Street, New York 6, N. Y.
Telephone: Digby 4-1920 • Cable: NYLOSTRA, New York

Have you tried
JEFFERSON CHEMICAL'S
NEW ETHYLENE OXIDE?

VITAMIN D-2 and D-3
Stable to Minerals and Oxidation
Calciferol
Crystalline D_3 Crystalline D_3 Compound
Oil & Water Miscible (Mineral) Stable Powders
Dihydrotachysterol

PURE VEGETABLE EXTRACT COLORS
YELLOW — RED — ORANGE

BOWMAN YEAST PRODUCTS
Hickory Smoked Yeast
Primary (Torulopsis utilis) Brewers' (Sacchromyces cerevisiae)
Powders — Flakes — Extracts — Concentrates — Hydrolysates
Vitab® B-Complex Extract

SPECIALITIES
CHLOROPHYLL CAROTENE
PHYTOL XANTHOPHYLL
VIANOL®
ANTI-OXIDANT (BHT)
ENZYMATIC SYSTEMS
PROTEIN DERIVATIVES

CHARLES BOWMAN & COMPANY
220 East 42nd Street, New York 17, N. Y.
600 South Michigan Avenue, Chicago 5, Ill.
130 Central Avenue, Holland, Mich.
13160 Ortley Place, Van Nuys, Calif.
Chorney Chemical Co., Montreal, Canada

Drugs, Fine Chemicals

Netherlands shipped 60,939 ounces, West Germany 52,628.

Imports of quinine alkaloid in September amounted to 750 ounces and came from the United Kingdom.

Botanicals

Catnip Leaves—Contrary to an earlier report, it appears that limited amounts of catnip leaves are available at 80c. to 90c. per pound.

Accounting for the extremely small stocks currently held by dealers is the fact that heavy, almost continual rains during the gathering season curtailed collections of the "wild" botanical. And what little material is cultivated is usually processed and packaged by the growers themselves.

Cascada Sagrada Bark—Current listing is 34c. to 36c. a pound and firm. Stocks are said to be light, demand good.

Goldenseal Root—Dealers don't see eye-to-eye on prices here either. Some say the quote is up to $3.25 a pound, others maintain that the listing is still $2.75 to $3. At any rate, new crop material is in and supplies, while they may be shorter than usual for this time of year, are generally considered adequate.

Lycopodium — Arrival of new crop lycopodium, bolstering dealers' stocks, has resulted in a price reduction amounting to 25c. a pound. Formerly listed at $3.50 to $3.75 per pound, the botanical is now selling at $3.25 to $3.50. Interest is described as moderate to good.

Passion Flower Herb—The price of passion flower herb was recently advanced from 35c. a pound, to a range of 40c.-45c., and a further increase is not unlikely. Here too, limited stocks account for the strong market.

Serpentaria Root—Limited stocks in face of relatively active demand has brought the quote on serpentaria root progressively higher. Last week's quote was $6.50 a pound.

Vitamins With No Taste Made for Chewable Tablets

The "Rovicote" family—coated, taste-free B-complex vitamins for use in chewable tablets—has been introduced by the vitamin division of Hoffmann-LaRoche, Inc., Nutley, N. J.

At the present time, there are four members—"Rovicote" thiamin, "Rovicote" riboflavin, "Rovicote" pyridoxine and "Rovicote" niacinamide—each available as a fine, dry powder.

"Rovicote" vitamins reportedly are free from the typical taste and odor of the B vitamins. This is accomplished through the use of a pure, edible, water-resistant coating.

The process is the result of several years of intensive investigation to produce vitamins suitable for use in chewable tablets. The coating itself is an inert material which will not affect the manufacturing procedures or the labeling requirements of tablet manufacturers.

According to R. W. Smith, general manager of the Roche vitamin division, " 'Rovicote' vitamins have no taste of their own. They are compatible with most flavors used in the production of chewable tablets. They will be useful to pharmaceutical manufacturers who have problems making chewable tablets because of the unpleasant taste of the B-complex factors."

Vitro Minerals Appoints

Eugene B. Hotchkiss has been named executive vice-president of Vitro Minerals Corporation, New York. Vitro Minerals is owned jointly by Rochester & Pittsburgh Coal Co. and Vitro Corporation of America.

HORMONES
DEHYDROCHOLIC ACID, N.F.
(Oral and Injectable Grades)
OX BILE USP
DRIED OX GALL POWDER
We invite your inquiries
GEDEON RICHTER
PHARMACEUTICAL PRODUCTS INC.
20 Exchange Place, New York 5, N. Y.

• Thyroid U.S.P. Powder
• Calcium Caseinate
• Saccharin U.S.P.
• Sodium Cyclamate NNR
• Terpin Hydrate
CONRAY PRODUCTS CO. INC.
129A Pearl Street New York 5, N. Y.
Phone: HAnover 2-6971

P_3B
BERYLLIUM • LANTHANUM • CERIUM
THORIUM and ZIRCONIUM SALTS • AMMONIUM BIFLUORIDE
TITANIUM POTASSIUM OXALATE
ABSORPTION BASE • CHLOROPHYLL • LANOLINE, U.S.P. • SAPONINE
BIOLOGICAL STAINS • ph BUFFER SOLUTIONS
"FIXANAL" CONCENTRATED PREPARATIONS FOR NORMAL SOLUTIONS
MOLDOL (Preservative)
SINCE 1900
Pfaltz & Bauer, Inc.
EMPIRE STATE BUILDING, NEW YORK

REINVESTIGATE THE SULFONATED PHENOLS
SODIUM PHENOL SULFONATE
(Sodium Sulfocarbolate)
$HOC_6H_4SO_3Na2H_2O$ M.W.232.2
AMMONIUM PHENOL SULFONATE
(Ammonium Sulfocarbolate)
$C_6H_9NO_6S$ M.W.191.2
ANY QUANTITY . . . INCLUDING CARLOADS
Exceptional results shown in many such applications as tableting and in conditioning granular mixtures to flow freely, and other likely potential uses. Ask Dept. A, Bonewitz Laboratories, Inc. for samples, prices, deliveries.
PRINCIPAL PRODUCTS
CHARCOAL • COBALT COMPOUNDS • MANGANESE SULPHATE • GLAUBER'S SALT 10 mol. • AMMONIUM PHENOLSULFONATE • SODIUM PHENOLSULFONATE • ZINC PHENOLSULFONATE • DICALCIUM PHOSPHATE • PIPERAZINE COMPOUNDS • PEPSIN
CUSTOM SERVICES
CUSTOM MIXING OF ALKALINE AND ACID CLEANING COMPOUNDS AND TECHNICAL ASSISTANCE IN PRIVATE CONFIDENTIAL FORMULATIONS AVAILABLE AT BOTH PLANTS
BONEWITZ LABORATORIES, INC. CHEMICALS, INC.
THE BONEWITZ COMPANIES
of Burlington, Iowa and Manteca, California

Penick's Chicago Branch Marks Silver Anniversary

S. B. Penick & Co. recently marked the twenty-fifth anniversary of its Chicago branch office. Established in 1934 by Harold A. Meyer, a Penick vice-president, the branch services the area with complete stocks of material from all three Penick divisions: botanical and allied products division, NYQ Chemical Division, and farm chemical and insecticide division.

In charge of the branch since 1946 has been Ralph A. Olson, also a Penick vice-president.

DCAT to Hear Cancer Talk

Drug, Chemical & Allied Trades Association will hold its fall luncheon meeting November 30 at the Waldorf-Astoria hotel, New York. Speaker will be Dr. John R. Heller, director of the National Cancer Institute, who will discuss recent developments in cancer research.

Toiletries Manufacturers

—*Continued from page 5*

to be decided before any cosmetic bill is to be sent to congress is whether clearance as to safety must be obtained through pre-testing for every ingredient used in a cosmetic, or whether it should be necessary only to obtain clearance for the formulation.

Mr. Harvey said that this is a matter the agency will want to discuss with industry to obtain its views before congress is asked to consider any cosmetic control legislation.

He gave no indication as to when FDA hopes to have a bill ready for submission to congress, but it is believed officials would like to get a start on the bill soon so that a draft can be introduced during the coming session—if only to get something before congress and industry for study.

Fertilizer Market to Hold

—*Continued from page 4*

centage of P_2O_5 relative to the other two major elements, prices have increased.

The department said that "the price of the crop, as well as the cost of fertilizer may influence the decision with respect to fertilizer use. For example, because of lower prices of corn, about seventy-four bushels are required to buy a ton of ammonium nitrate. In 1957, it took seventy bushels.

"Even though the ratio is less favorable than formerly, the decision on whether to use more fertilizer depends on returns from alternative uses of funds. Another item of major significance is the level of other costs of crop production. As these other costs rise, more fertilizer would be needed to maximize returns on the investment in producing the crop."

Sulfuric Plant Opened

—*Continued from page 5*

plan envisioning a chemical complex on the firm's seventy-acre site at Paulsboro.

Late next year, Dixon Chemicals expects to start up its now $4 million hydrofluoric acid plant at Paulsboro.

Dixon Chemical Industries is 27 percent owned by Dixon Chemical & Research, Inc., of Bloomfield, N. J.

Dixon Chemical & Research is chiefly engaged in the sale of sulfuric acid which it produces at its plant in Newark, N. J. This facility is capable of turning out about 200,000 tons of acid a year. The Bloomfield-headquartered firm is now building at 40,000-ton aluminum sulfate plant in Newark at a cost of around $1.5 million.

The Paulsboro sulfuric acid plant will produce sulfuric from acid-bearing sledge obtained from oil refining processes and will also produce acid from dry or molten sulfur.

Output from the Paulsboro plant will go to industrial users in the Delaware Valley. The Newark plant mainly serves industrial consumers in an area extending from southern New Jersey to New England.

Hercules Does Encore

—*Continued from page 5*

owned by Cities Service Refining Company and the heirs of Arsene P. Pujo.

"Pro-fax," trade mark for Hercules polypropylene, was developed at the company's research center near Wilmington some three years after it began work on high-density polyethylene.

Elmer F. Hinner, general manager of Hercules cellulose products department, says that production will begin in the first unit of the new plant as soon as completed, "without waiting for completion of the maximum-designed facility."

METOL

Monomethylparaminophenol Sulfate
Registered Trade Mark

TANNIC ACID GALLIC ACID
(U.S.P. and Technical Grades)

PYROGALLIC ACID
(U.S.P. and Technical Grades)

THE HARSHAW CHEMICAL CO.
CLEVELAND 6, OHIO

Cleveland • Chicago • Cincinnati • Detroit • Hastings-on-Hudson, N. Y.
Houston • Los Angeles • Philadelphia • Pittsburgh

A LEADER IN BIOCHEMICAL RESEARCH

attention: **Purchasing Director**

re: Items of interest for research and product development

Are you or your product development and research people looking for basic materials for new products in the fields of enzymes, antioxidants, hormones, fine chemicals, glandulars, blood fractions or biochemicals? Would they like expert technical assistance in using these items in their product development and research?

We can supply these special materials and can work with them in the development of new products. For information, contact our technical representatives.

Call WElls 2-6771 in Kankakee, Illinois, or RAndolph 6-1923 in Chicago. Or write to:

Bio-Chemical Dept.
ARMOUR PHARMACEUTICAL COMPANY
Kankakee, Illinois

PROLASE® 300

OPENS NEW PATHS TO PROFITS

Prolase 300 is a rigidly standardized proteolytic enzyme derived from the tropical plant, Carica papaya. Its high purity, low odor and *guaranteed uniform potency* make possible pharmaceutical and cosmetic preparations of hitherto unattainable elegance and reliability.

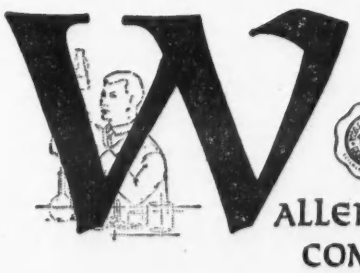
A Versatile and Practical Enzyme

Orally, Prolase 300 in digestive aids maintains its activity in duodenum, jejunum and colon, as well as in the stomach. Significance? Really effective correction of incomplete protein utilization and of certain chronic dyspepsias. *Topically*, Prolase 300 gives excellent results in products for burn debridement, ulcer and wound therapy, and treatment of vaginal conditions.

Veterinary uses include anthelmintics, debriding agents, products for mastitis and pyometritis. And because Prolase 300 is compatible with Gramicidin and Tyrothricin, this versatile enzyme may be freely combined with these potent antibiotics for *both human and animal use.*

Ideas are Available, Too!

Wallerstein R&D men can show you how to create new products and new profits with Prolase 300. Contact Gerry Gray for technical information and price schedules on Prolase 300—*a proteolytic enzyme of guaranteed uniformity.*



WALLERSTEIN COMPANY

PHARMACEUTICAL DIVISION
Wallerstein Square, Mariners Harbor
Staten Island 3, N.Y.
GIbraltar 2-6400

Wallerstein Manufactures Enzymes and Antibiotics for the Pharmaceutical and Cosmetic Industries

Announcing

a great new name in essential oils

GUARANTEED TOP-QUALITY! Only the finest essential oils produced by Minute Maid carry the "Sunfilled" brand. Oils of lesser quality are available unbranded at lower cost.

Guaranteed pure! All "Sunfilled" oils are produced and packed under continuous inspection of the U.S. Department of Agriculture! They come to you protected by tamper-proof seals. No adulteration or sophistication is possible.

Guaranteed supply! As America's largest supplier of citrus products, Minute Maid provides an ample, assured, dependable source for all your essential oil requirements.

Complete line! Only Minute Maid offers a complete line of both Florida and California citrus oils—all-Valencia Florida or California orange oil and California lemon oil, all Cold Pressed, U.S.P.; also Cold Pressed grapefruit, lime and tangerine oils.

For further information, price quotations or service, write or phone today.

CITRUS PRODUCTS DIVISION
MINUTE MAID CORPORATION
Orlando, Florida
New York, N.Y.: 420 Lexington Avenue • OREgon 9-8755

Essential Oils, Aromatics

Little or no lime oil will be available from the Mexican State of Colima for three of four years, the New York representative of the Mexican lime growers co-operative reported upon his return from the stricken area. According to this spokesman of the Union Nacional de Productores de Aceite de Limon, it will take the bulk of the lime crop for the next few years to satisfy the fresh fruit market, thereby making the distillation of oil practically impossible. (The fresh fruit trade is far more lucrative than the oil trade.)

Last month's storm that came off the not-so-pacific Pacific, reportedly did its damage in waves, the representative explained. Approximately 80 percent of the lime trees growing nearest the coast were damaged; 50 percent of those growing a bit inland were damaged, and only about 20 percent of those the furthest inland suffered.

Trees are scattered throughout the State of Colima which usually produced 40 percent of the annual Mexican output. The whole of Mexico produces some 90 percent of total world production.

It takes four or five years for a newly planted tree to start producing fruit, the representative said.

More information ought to be available soon following the board of directors meeting scheduled for later this week.

On spot, no essential oil dealers have raised their prices as a result of the disaster.

They have, however, raised their prices on a few other items. Both spearmint and peppermint took giant steps upward, according to the survey of essential oil dealers in the New York area.

Spearmint went up $1.75 per pound, natural peppermint went up 35 cents per pound and redistilled peppermint went up 45 cents per pound.

Other interesting alterations were on the reduction side. The geranium oils on spot are finally reflecting the source price reductions that have been taking place over the past weeks. Source prices are reported to be some 20 percent lower now than they were at their height. On spot, Algerian declined $1.50 per pound and Bourbon declined $8 per pound.

The other pricing activity, and it was considerable, was nonetheless, relatively insignificant.

Essential oil and aromatic chemical price reductions are as follows:

Amyl cinnamic aldehyde, 5 cents per pound; anisic aldehyde, 5 cents per pound; Puerto Rico Bay, 50-55 percent, 35 cents per pound; decyl alcohol, perfume grade, 15 cents per pound; dillweed, 25 cents per pound; dimethyl anthranilate, 20 cents per pound; diphenyl oxide, perfume grade, 10 cents per pound, ethyl benzoate, 15 cents per pound; ethyl butyrate, 5 cents per pound; ethyl oenanthate, 15 cents per pound; eucalyptol, 5 cents per pound; Canadian fir, 15 cents per pound.

Also soap-grade geraniol, 10 cents per pound; grapefruit, 15 cents per pound; hydroxycitronellal, 45 cents per pound; isobornyl acetate, 2 cents per pound; isobutyl acetate, perfume grade, 40 cents per pound; methyl benzoate, 5 cents per pound; phenyl acetaldehyde, 50 percent, 60 cents per pound; phenylethylacetate, 5 cents per pound; Spanish sage, 10 cents per pound; artificial sassafras, 2 cents per pound, and red thyme, 10 cents per pound.

Price Trends

Advanced

Peppermint, natural, 35c. per lb.
redistilled, 45c. per lb.
Spearmint, $1.75 per lb.

Reduced

Amyl cinnamic aldehyde, 5c. per lb.
Anisic aldehyde, 5c. per lb.
Bay, Puerto Rican, 50-55%, 35c. per lb.
Decyl alcohol, perfume grade, 15c. per lb.
Dillweed, 25c. per lb.
Dimethyl anthranilate, 20c. per lb.
Diphenyl oxide, perfume grade, 10c. per lb.
Ethyl benzoate, 15c. per lb.
Ethyl butyrate, 5c. per lb.
Ethyl oenanthate, 15c. per lb.
Eucalyptol, 5c. per lb.
Fir, Canada, 15c. per lb.
Geraniol, soap-grade, 10c. per lb.
Geranium, Algerian, $1.50 per lb.
Bourbon, $8 per lb.
Grapefruit, 15c. per lb.
Hydroxycitronellal, 45c. per lb.
Isobornyl acetate, 2c. per lb.
Isobutyl acetate, perfume grade, 40c. per lb.
Juniper berry, twice rectified, 35c. per lb.
Methyl benzoate, 5c. per lb.
Phenyl acetaldehyde, 50%, 60c. per lb.
Phenylethyl acetate, 5c. per lb.
Sage, Spanish, 10c. per lb.
Sassafras, artificial, 2c. per lb.
Thyme, NF, red, 10c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Nov. 21, 1958
146.43	147.80	147.85	147.99

For Current Prices see page 10

Essential Oils

Bay—The NF Puerto Rican, 50-55 percent material, in cans, is currently selling for as little as $1.95 per pound.

Citronella — The self-imposed quota Formosans had placed on their exports seems to have been upped, according to usually reliable reports. Instead of the previously announced 4,400,000 pounds for 1959, they now say they will ship up to 5,000,000 pounds of oil. Even this quota is filled, say the people in the New York area.

They also report that there is no immediate hint that source prices will go up. Spot material remains at 80c. per pound. Ceylon spot material remains at 75c. per pound.

Dillweed—Domestic dillweed oil came down in price from $3.25 to an even $3 per pound. Some dealers, however, are still asking as much as $4.25 per pound for their material.

Fir—Canadian material came down in price 15c. per pound.

Geranium—Apparently the prediction that prices were coming down is coming true. At least one dealer has announced that he is back in the geranium business at rather reduced prices. Algerian material has come down in price from its previous high of $20.50 per pound to $19 per pound. Bourbon material is down to $18 per pound, as compared with its previous high, $26 per pound. The word from source is that prices are not 20 percent lower than they were a couple of months ago. The downward trend is expected to continue, it was said.

Grapefruit—From its previous high of $2.10 per pound, grapefruit oil has come down to $1.95 per pound.

Juniper Berry—The twice-rectified material is reported to have come down from $3.60 per pound to $3.25 per pound. No change was noted in the regular type which remains at $2.90 per pound.

Lemongrass — The tight situation is about the same as it was a week ago—only more so—as one essential oil dealer recently put it. Many New York companies have no material to offer and those who do are asking quite a tidy sum for it, so it is difficult to arrive at an accurate quotation.

Roughly speaking however, the range remains the same as it was previously, from $1.75 to $2.05 per pound.

Information from source indicates that shipping prices continue to climb and that little relief is in sight.

Lime—In spite of extensive damage in Mexico, affecting a good portion of the lime trees, prices on spot have remained unchanged. Mexican continues to range between $6.25 and $6.75 per pound; West Indian, between $5.90 and $7.80 per pound, and West Indian expressed, $7.75 and $13.50 per pound.

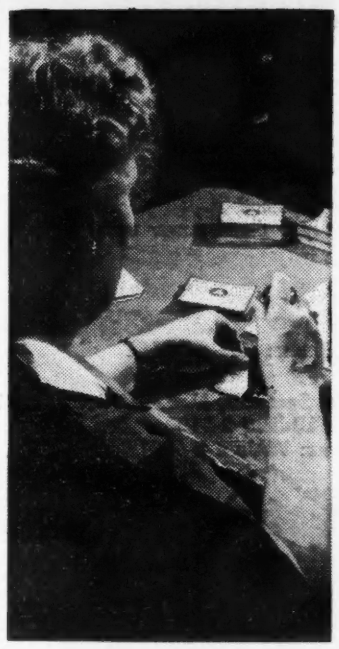
Peppermint — A survey of the major peppermint dealers in the New York area indicates that the low of the range for natural has climbed to $3.90 per pound. A number of dealers, however, are asking upwards of $4 for their stocks. Redistilled material ranges between $4.20 and $4.90 per pound.

News from peppermint growing regions is that the price will remain firm for an indefinite length of time.

Pimento Leaf—No further word on the drought in Jamaica has been received here and the market is reported to be rather firm. Prices remain between $2.10 and $2.60 per pound.

Sage — It has been reported that the Spanish variety is now selling for $1.25 instead of the previously quoted, $1.35 per pound. Clary remains at $20 per pound and Dalmation remains at $3.25 per pound.

Sassafras — The artificial material, in



"PEDIGREED" PRODUCTS

Control numbers stamped on the labels of all MM&R products identify their "pedigree" through every stage of manufacture. It is your assurance of unexcelled quality, purity and uniformity.

MAGNUS, MABEE & REYNARD, INC.
The World's Most Famous Supplier of Essential Oils, Basic Perfume Oils, and Concentrated Flavors
16 DESBROSSES STREET • NEW YORK 13, N.Y.

ESSENTIAL OILS
PENICK
S. B. PENICK & COMPANY
100 CHURCH ST., NEW YORK 8
735 W. DIVISION ST., CHICAGO 10
PERFUMES, FLAVORS AND AROMATICS DEPARTMENT

ESSENTIAL OILS • PERFUME OILS • FLAVORS • AROMATIC CHEMICALS and ODOR MASKS
Proven Replacements For: BERGAMOT OIL, CITRONELLA OIL, ANISE OIL, CASSIA OIL
DOMESTIC EXPORT — YOUR INQUIRIES SOLICITED
D. W. HUTCHINSON & CO., INC., 700 South Columbus Ave., Mount Vernon, N. Y.
Founded 1896 — Telephone: Mount Vernon 4-7272

AEROSOL BOUQUETS
FLAVORING EXTRACTS
MASKING ODORS
for INDUSTRIAL PURPOSES
by Florasynth LABORATORIES, INC.
900 VAN NEST AVE., NEW YORK 62, N. Y.
Chicago 6, Los Angeles 21, and other principal cities in the U.S., Canada and Mexico

LINALYL ACETATE
WE VOUCH FOR ITS QUALITY ... WE MAKE IT OURSELVES!
A NEW and unique process of our own development guarantees a product unsurpassed in purity and uniformity. Now manufactured at our Clifton plant, this important constituent of such oils as lavendar and bergamot imparts a fresh, clean topnote to all floral and many oriental types of composition.
FREE SAMPLE ON REQUEST
FRITZSCHE Brothers, Inc. Established 1871
PORT AUTHORITY BUILDING, 76 NINTH AVENUE, NEW YORK 11, N. Y.
BRANCH OFFICES and *STOCKS: Atlanta, Ga., Boston, Mass., *Chicago, Ill., Cincinnati, Ohio, Greensboro, N. C., *Los Angeles, Cal., Philadelphia, Pa., San Francisco, Cal., St. Louis, Mo., Montreal and *Toronto, Canada; *Mexico, D. F. and *Buenos Aires, Argentina. FACTORIES: Clifton, N. J. and Buenos Aires, Argentina.

IN BULK — DRY or LIQUID

CHEMICAL

TRANSPORT SERVICE TO MOST OF THE UNITED STATES

- A complete line of modern tank equipment!
- Thru-service with two-man, sleeper-type diesel power units
- Portable pumps and accessories
- 28 terminals
- Units available within hours
- *Call collect* to our general office:

Kingsport, Tennessee • Phone: Circle 5-3191

or our regional offices:

New York, N. Y. • Phone: Secaucus, N. J.—UNion 6-1002

Chicago, Illinois • Phone: LUdlow 2-5100

Charleston, W. Va. • Phone: WAlnut 5-4701

General Offices: Kingsport, Tenn.

Fragrance and Research

The better product fragrances of today are the result of extensive research . . .

- Basic research into the sources of natural fragrance.
- Finding new aromatic materials.
- The development of better processing methods.
- The study of the psychology of scent.
- An understanding of trends and preferences in perfumes.

With this sound background of broad research in many areas, van Ameringen-Haebler can better serve your fragrance needs.

FACILITIES TO SERVE THROUGHOUT THE WORLD

ARGENTINA, AUSTRIA, BELGIUM, BRAZIL, CANADA, ENGLAND, FRANCE, GERMANY, HOLLAND, INDONESIA, ITALY, NORWAY, SOUTH AFRICA, SWEDEN, SWITZERLAND

Alva FLAVORS

for basic good taste in pharmaceuticals and foods.

Creators and Manufacturers of Flavors, Fragrances and Aromatic Chemicals

van Ameringen-Haebler *division*

INTERNATIONAL FLAVORS & FRAGRANCES INC.

521 West 57th Street • New York 19, New York

Essential Oils

drums, came down from 45c. per pound to 43c. per pound. Natural material ranges between $1.45 and $2.15 per pound.

Spearmint — Dealers report increasing difficulty in getting material from the suppliers. Prices, therefore, have continued to advance until they now range between $8 and $9 per pound.

This is not the whole story, however. Even the dealers who furnish these prices admit they have little or no material. And they won't have any for sale until the spearmint oil producers decide to let them have some. It must be kept in mind that the Department of Agriculture has already estimated the 1959 crop to be some 30 percent larger than the 1958 one.

Thyme—Red material NF, came down in price 10c. per pound. It now ranges between $1.80 and $2.15 per pound.

Aromatic Chemicals

Anisic Aldehyde—A 5c. per pound reduction puts the low of the range at $1.50 per pound, according to dealers here in the New York area.

Decyl Alcohol—The perfume grade, in bottles came down from $1.75 to $1.60 per pound.

Dimethyl Anthranilate — The range is currently $4.15 to $5.10 per pound.

Diphenyl Oxide—A 10c. per pound reduction in the perfume grade brings the low of the range down to 55c. per pound.

Ethyl Benzoate—The low of the range is currently at 75c. per pound.

Methyl Benzoate — The range is between 60c. and 75c. per pound.

Phenyl Acetaldehyde—The 50 percent grade is currently selling for $2.35 per pound.

Seeds and Spices

Ginger—Only small amounts of African and Cochin material are available.

Pepper—The market is reported to be quite strong, mainly because of the small size of the arrivals expected this month and the next. Prices, generally, are advancing.

The following information about Sarawak's pepper production comes to us from the Foreign Agriculture Circular, published by the United States Department of Agriculture.

The Sarawak Department of Agriculture has a plant pathologist working full time on pepper, plus a new laboratory for experimental work. Recently an agronomist was added to the staff, devoting full time to pepper breeding, hoping to develop disease-resistant varieties.

Another reason for the sharp decline in production is that the high prices of recent years had stimulated speculative planting of pepper by persons not usually dependent upon it as a livelihood. Now, however, it is felt that production is back in the hands of experienced producers, and should increase somewhat after 1959.

The government of Sarawak endorsed a recommendation of the Marketing Advisory Committee that it undertake to market its pepper directly, bypassing Singapore. This goal will not be easy, since some Singapore dealers have gardens of their own and finance Sarawak growers. Additionally the adequate grading, cleaning, packaging, storing facilities and shipping service available at Singapore will make bypassing difficult.

Vanilla Beans—In a rather surprising development, the bean market exhibited firmness. Instead of going down again in price, as dealers here had speculated earlier, the prices stayed at their previous levels.

Material from Madagascar and Mexican cuts are selling for $15 per pound and Mexican wholes are selling for $15.50 per pound.

Seaway Clarifies Its Role In Stepan Chemical Set-Up

Seaway Chemical Corporation's role in the operations of Stepan Chemical Company has just been clarified in a statement by Jerome Kritchevsky, who recently organized Seaway in Chicago.

Seaway, Mr Kritchevsky reports, will act as export liaison between Stepan and the several firms that handle overseas sales for Stepan and its Ninol Division.

Wallach-Gracer Export Corporation, New York, reports that it is continuing as exclusive representative for all of Stepan's overseas sales except those of the Ninol Division.

HEADS PHILA. DRUG GROUP: Carl K. Raiser, assistant to the president of Smith, Kline & French Laboratories, who has been elected president of the Philadelphia Drug Exchange.

Scientific Design Reports On Status of Maleic Projects

Scientific Design Company, New York, has clarified an item in last week's OPD concerning the status of its maleic anhydride projects.

SD was responsible for the maleic plant built several years ago for Reichhold Chemicals, Inc., in Elizabeth, N. J. Reichhold's new maleic anhydride facility, due to go on stream in June of next year, is being built by Badger Manufacturing Company, Cambridge, Mass. (OPD, 6/29/59).

Rosin Production to Hold

—Continued from page 7

about half of current output. The major steam distilled producers have invested in alternate sources of naval stores and are planning further investments.

"Tall oil rosin is unlikely to fill the supply vacuum resulting from the expected decline in the production of steam distilled wood rosin during the next several years.

"Among the limiting factors are supplies of softwood sulfate pulp, tall oil fractionating capacity, and the tendency of increased tall oil rosin supplies and expanded paper size requirements to go hand in hand.

"Output of softwood sulfate pulp is expected to increase an average of about 6 to 7 percent annually over the next several years. Meanwhile, planned expansion in tall oil fractionating capacity should increase the potential for tall oil rosin output about 10 percent annually over the next two years.

Annual Increases Fall Short

"Such annual increases will fall far short of meeting the expected decreases in steam distilled rosin production of about 100,000 drums annually for the next few years.

"Moreover, a large part of the added potential output of crude tall oil generated by greater utilization of soft-wood pulp is offset in its effect on the rosin market by the accompanying increase in rosin size requirements.

"The greatest potential for expansion lies in pine gum farming. Growth in this segment of the industry offers the most hope in closing the progressively widening gap between demand and output.

"If the substantially higher prices expected for rosin are translated into proportionately higher crude gum prices to gum farmers, it is likely that gum production will increase for the first time since 1949. A start in this direction is being made in the Southwest, where gum farming operations are scheduled to begin in 1960."

FLAVORS PFW SCENTS

POLAK'S FRUTAL WORKS INC., MIDDLETOWN, N.Y.

Coatings Materials

Resumption of work in the steel mills as a result of the Taft-Hartley 80 day injunction has not meant any immediate changes in the coatings materials market. It is generally felt that it will be six weeks after the end of the strike before industry will be back to normal and running smoothly. This is true of the plasticizers. In another two of three weeks there should be sufficient supplies of naphthalene available for production of phthalic anhydride and then another two or three weeks before phthalate plasticizers are back on the market in any kind of volume. Phosphate plasticizers and extenders have not felt the strike incurred shortages and are reportedly moving well.

Monday, November 23, brings another price advance to the cadmium colors. The cadmium mercury lithopone oranges and reds will move up in line with rises in cadmium lithopones and C.P. cadmium colors. Again, the steel walkout made itself felt making costs of cadmium metal climb, and in turn the cadmium colors.

Earth colors were described as moving smoothly with no dire consequences of the steel strike felt. One source explained that at this time of year there is always a certain slack off in sales and that had been no increase in this drop this year. Another source, on the other hand, felt that there had been slow ups in demand for earth colors as customers had been hindered by the strike.

All grades of gums and shellacs in the natural resins market remain the same at previous listings. It has been a matter of months since any fluctuation was felt in either market. The Calcutta shellac market was black to normal with prices back down to floor levels after a sharp rise in the end of the summer.

Casein markets continued to be in rather bad straits. Supplies are difficult to come by in all producing areas, and available until late December into in the Argentine the best offers are not available until late December into January.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Nov. 21, 1958
103.03	103.03	103.03	103.10

For Current Prices see page 10

Prime Pigments

Cadmium Colors—Price changes in this market have been upward. And, as of November 23, more prices in this line will rise. Recently, C.P. cadmium red and yellow advanced 10c. while the cadmium lithopone yellows, reds, oranges, and maroons climbed 3c. per pound. As of Monday the listings for the cadmium mercury oranges, reds, and oranges will also move up 3c.

New price for cadmium mercury lithopone orange, deep shade is $1.61, and for the reds: dark shade, $1.91; light shade, $1.68; medium shade, $1.83; medium light shade, $1.76; and for maroon shade, $1.99 per pound, barrels, freight allowed East of Rockies.

Producers attributed these advancing listings to the higher costs of cadmium metal, which in turn has been rising due to the finally concluded strikes in the non-ferrous metals mines.

Chrome Colors—A report prepared by the Bureau of Census on inorganic chemicals and gases in 1953 lists total shipments, including interplant transfers, of chrome colors at 3,997 short tons valued at $3,048,000. Total production of this group in 1958 came to 3,907 short tons.

In 1957 and 1956 the figures for the chrome colors were tallied thus: total shipments came to 4,289 and 5,390 short tons with values of $3,481,000 and $4,170,000, respectively. Complete output for both years ran to 4,594 and 5,238 short tons.

For the years 1955 and '54, the Census Bureau listed total shipments at 6,302 and 6,633 short tons, worth $4,739,000 and $5,025,000. Production for those two years amounted to 6,586 and 6,611 short tons.

Copper Pigments—Several weeks ago, the price of copper metal staged a sharp advance as a result of the strikes. The following week the prices of cupric and cuprous copper oxide rose 1½c. per pound. The increases were said to reflect the climbing cost of copper carbonate, metal, sulfate and chloride, which in turn were influenced by the strikes here and the threats of walkouts in Chile.

New price of cupric copper oxide is now 49½c. per pound, barrels, 100 to 5,000 pound lots. Cuprous cooper oxide has a new listing of 50½c. for U.S. Navy type O, and 48½c. per pound for U.S. Navy type II.

Earth Colors—This is one section of the coatings market which did not and has not felt any serious effects as a result of the steel strike. One source said that there is always a certain percentage drop in volume of business towards the end of each year due to vacations, holidays, etc., and as far as he could see there had been no greater drop than usual because of the steel walkout.

In fact, most producers said it had been a good year. One maker of earth colors, however, felt that this market had been effected indirectly by the strike. The materials themselves have been in abundant supply, but customers have not been buying as much as they usually do.

Synthetic earth colors continue to make gains over the natural colors, but it is generally thought that there is room in the market for both types.

Raw and burnt sienna pigments has been moving along peacefully, too. However, customers were having some difficulty obtaining steel cans and drums.

Lacquer Materials

Suspension of the steel strike and resumption of work in the industry does not necessarily mean complete and immediate recovery of the plasticizers market. In fact, it is generally felt that business will not resume normal proportions until about six weeks after the end of the strike which is close to the end of the 80-day Taft-Hartley injunction period. Then there is some anxiety in the market as to what will happen with the close of the injunction.

One source expects December to be almost as bad as November, and some producers are still allocating their supplies of phthalates. Shortages in the plasticizers field were caused by tight supply problems in naphthalene and phthalic anhydride, in turn incurred by the steel strike.

It was said that it might be two or three more weeks before enough naphthalene will be available to make sufficient phthalic anhydride to produce plasticizers. Among the plasticizers affected by the steel strike were dibutyl, dioctyl, and di-iso-octyl phthalates.

Some plasticizers manufacturers have been using other materials, but they have not been getting the results they'd like and also it has been necessary to pay more.

Natural Resins

Gums—Reports on listings of the various grades of gums continued to be steady last week. For several months now this market has been without price fluctuations. Furthermore demand seems to be good and steady with buyers following a hand-to-mouth buying policy.

Running down the line of the Manila copal gums: grade C is listed at 35c. to 39c., DBB at 25c. to 28c., DK dust at a nominal price of 14c., and MA soft at 20c. to 24c. Philippine gums held steady at 23¾c. to 26c. for pale chips, 33¼c. to 37c. for nubs, 20c. nominal for seeds, and 22¾c. to 25c. for sorts. Finally, Pontianak chips were priced at 26c. and 27c. to 40c. for nubs.

Shellac—Steady continued to be the word for this market last week. Sales were steady, demand was even, and prices were the same. The Calcutta was also enjoying steady demand and prices. One source said that there have been fairly heavy purchases by European markets.

Running down the list of shellac grades: Bleached bonedry held steady at 46c. for bags, 47c. for barrels, and 48c. for kegs. Bleached refined shellac had listings of 56c., 57c. and 58c. per pound for bag, barrel and keg quantities respectively.

Cellulose acetate
Cellulose acetate
butyrate

Eastman
CHEMICAL PRODUCTS, INC.
KINGSPORT, TENNESSEE
subsidiary of EASTMAN KODAK COMPANY

CHAS. L. READ & CO., INC.
1 NEWARK AVENUE, JERSEY CITY, N. J.
Phone: NEW JERSEY DE 2-2052 NEW YORK WO 4-111
THE FIRST NAME IN TURPENTINE
GUM SPIRITS • STEAM DISTILLED • SULPHATE

Heyden looks at the classics

Rembrandt: The Syndics of the drapers. Courtesy The Bettmann Archive.

"The facts are plain Herr Doctor, Heyden Pentek® saves processing dollars"

Economical processing . . . thanks to a low volatility which holds down material losses . . . is only one of Pentek's outstanding qualities. Specify Pentek® or Monopentek® whenever you order polyols. 8113

HEYDEN CHEMICAL DIVISION
Heyden Newport Chemical Corporation
342 Madison Avenue, New York 17, New York

Coatings Materials

Orange shellac, lemon No. 1 was the same at 37c. to 39c., as were No. 2 and superfine at 34c. to 37c. and 32c. to 34c., in that order.

Miscellaneous

Casein — Market conditions remain much the same as were reported two weeks ago. Poor crops this year in Europe sent those markets scurrying for all the available material they could get, and thus, put more pressure than usual on the remaining producing areas.

Even in the Argentine, which is the largest producer of casein, is in bad straits, and the best offer available is for delivery the latter part of December, into January. New production is now going on in the Argentine and will continue through December and January. Reports show that soils are in good condition and rains have been abundant pointing to a fruitful crop. One estimate of the crop size is 10,000 tons produced each of the three production months which totals 30,000 tons overall.

Other producing areas are almost sold out as well. Casein is very difficult to come by in Australia as it is in Poland. It remains to be seen if the heavy demand from European markets will continue next year.

Glue—The following figures, compiled by the Census Bureau, indicate production, shipments and stocks of bone and hide glue in thousands of pounds during September with August's figures shown for comparison:

Production

	September	August*
Hide glue, total	3,780	3,990
Low grade	1,615	1,521
Medium grade	1,146	1,647
High grade	764	614
Extra high grade	255	178
Bone glue, total	3,910	4,228
Green	2,953	3,340
Extracted	957	888
Glue, total	7,690	8,218

Shipments

Hide glue, total	4,353	6,035
Low grade	1,754	2,172
Medium grade	1,244	2,080
High grade	664	1,201
Extra high grade	491	582
Bone glue, total	3,959	5,005
Green	2,816	3,865
Extracted	1,143	1,140
Glue, total	8,312	11,040

Stocks

Hide glue, total	18,120	18,703
Low grade	5,909	6,048
Medium grade	6,737	6,835
High grade	3,775	3,875
Extra high grade	1,709	1,945
Bone glue, totoal	9,366	9,415
Green	8,382	8,245
Extracted	984	1,170
Glue, total	27,498	28,118

*Revised.

Naval Stores

Pine Gum—For the week ended November 7 the average price per standard barrel of commercial crude pine gum was reported at $28.40 as compared with $28.70 the previous week and $23.40 a year ago. The volume of gum deliveries to plants totaled 11,400 barrels as against the previous week's 10,235 and 11,750 a year ago. Content per barrel included an average 8.78 gallons of turpentine and 298.4 pounds of rosin. Gum grading percentages ranged as follows: WW, 6; EG, 10; N, 29; M, 44; K and below, 11.

Rosin, Gum

(USDA, per 100 lbs.)

	Fri. Nov. 13	Mon. Nov. 16	Tues. Nov. 17	Wed. Nov. 18	Thurs. Nov. 19
Drums—					
K	$9.74§	...	...	...	...
M	9.43	...	...	$9.56	$10.36
N	9.69§	...	...	...	...
WG	9.69	...	$9.72	...	...
WW	10.48§	...	10.73	...	...
Bags—					
N	...	...	...	...	10.86
WG	...	...	...	...	10.96
WW	...	...	...	...	11.06

Tankcars (for week ended November 19) M or better, $9.15; K or better, $9.15.

Sales, USDA

5,363* 3,090* 2,547* 10,156* 1,380*

New York

(Per 100 lbs., c.l., Friday)

WW, $12.25; WG, $11.75; N, $10.95; KM, $10.90.

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	...	...	.54	...	.53-1/10§
Sales	...	...	6,000¶	...	14,000¶

*—Drums equivalent. ¶—Gallons. §—Average price.

Tung Oil Situation

—Continued from page 7

were in the hands of the Commodity Credit Corporation, about 4 million more than last year.

The availability of up to 6.5 million pounds of imports on November 1 and a large domestic crop prevents commercial carryover from increasing above approximately 10 million pounds, it is added.

Domestic use of tung oil in the new marketing year is forecast at 45 million pounds, about the same as the 1958-59 level, and about average for recent years. The demand for tung oil last year was somewhat better than the year before, but the downturn in industry towards the end of the marketing year due to the steel strike probably affected demand somewhat.

However, prospects are that industrial output will rebound, and some further expansion is likely in the coming year, it is added. It is expected that the demand for tung oil will share in the general pick-up in demand for drying oils from the protective-coating industry.

In discussing world supply of tung oil, the department says that although exports last year declined slightly from 1958 they were still above the 1950-54 average. US exports were up sharply this year, while export availabilities from the 1958-59 crush in Red China, Argentina, and Paraguay declined sharply.

In recent months, the US has been the only country holding significant quantities of tung oil available in the world market. The outlook in 1959-60 depends almost entirely upon the situation in Red China. Good crops are expected in 1960-61 in Argentina and Paraguay, and carryover from 1959-60 is expected to be negligible.

NAFTONE VICE-PRESIDENT: Allen G. Lilla, director of sales for Naftone, Inc., New York, who has been elected a vice-president of the company.

has widespread applications

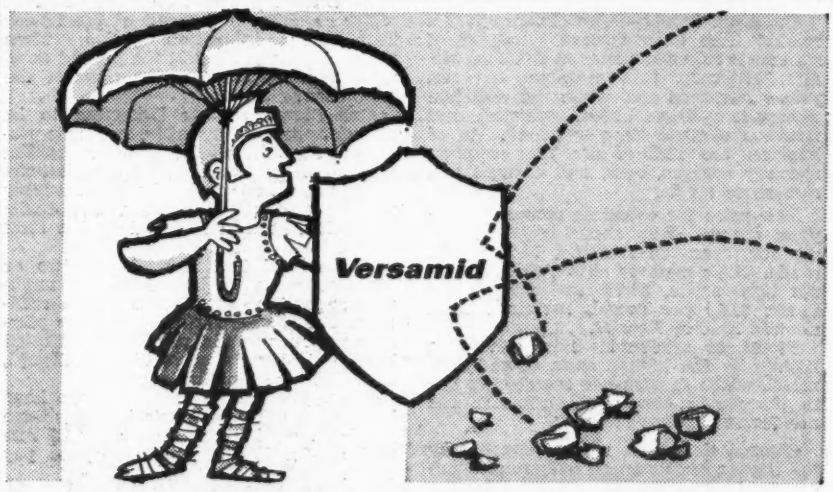
This basic, versatile chemical is used in the formulations of
RESINS • PHARMACEUTICALS
FERTILIZERS • CHEMICALS
PLASTICS
AND IN MANY OTHER FIELDS

GRACE . . . a major source . . . has "A WORLD OF EXPERIENCE" in producing urea of uniform purity and quality...

Write for samples, specifications and further information.

Grace Chemical Company
A DIVISION OF W. R. GRACE & CO.
MEMPHIS, TENN.

MEMPHIS—Home Federal Bldg., JAckson 7-1551 • CHICAGO—75 E. Wacker, FRanklin 2-6424
TAMPA—2808 S. MacDill Ave., 82-3531 • NEW YORK—7 Hanover Square, Digby 4-1200



***Versamid*-based concrete patching and topping compounds* resist water, chemicals, impact and abrasion better than concrete itself!**

When mixed with epoxy resin and ordinary sand, General Mills *Versamid* polyamide resins produce tough patching or topping compounds that trowel like concrete, feather smoothly, and maintain their adhesion in layers as thin as 1/16 of an inch! *And the bond is stronger than the internal strength of concrete itself!*

For complete technical details on Versamids, a variety of protective and decorative coatings and adhesive applications, write: Dept. OPD,

Versamids offer these important additional advantages
- Fast cure time
- Non-critical proportions
- Compatibility with a wide range of fluid epoxy resins
- Non-toxicity

CHEMICAL DIVISION
KANKAKEE, ILLINOIS

General Mills

SALES OFFICES: New York, Boston, Philadelphia, Cleveland, Charlotte, Chicago, Kankakee, Houston, Los Angeles, San Francisco

*General Mills does not make patching and topping compounds—only the Versamids that improve them.

Imports at US Ports

—*Continued from page 47*

CASEIN—152 bgs, Pacific National Bank, Sydney
CINNAMON QUILLS—55 bls, Hong Kong
CLAY, CHINA—2,000 bgs, Papermakers Import Co, Rotterdam
COPRA—750 tons, Pacific Vegetable Oil Corp, Castanas
1,000 tons, Cargill Inc, Dumaguete
250 tons, Procter & Gamble Co, Naspit
500 tons, American Trust Co, Nasipit
500 tons, Cebu
DAMMAR GUM—70 bgs, Internatio Rotterdam, Singapore
GELATIN—100 bgs, Antwerp
HEXACHLOROETHANE—90 bgs, C M C Chemicals Inc, Liverpool
LEAD, WHITE—800 bgs, London
MACE—16 cs, California Commodities Corp, Singapore
MAGNESITE—672 bgs, Western Chemical Co, Rotterdam
METHYLENE CHLORIDE—100 dms, D M Hicks, Bremen
NUTMEG—34 bgs, California Commodities Corp, Singapore
PEATMOSS—1,250 bls, Atkins Kroll & Co, Bremen
PEPPER, BLACK—35 bgs, Mac Albert Co, Singapore
24 bgs, C Czarinkow, Singapore
448 bgs, Singapore
PEPPER, RED—100 bgs, Hismoco American Co, Yokohama
100 bls, California Commodities Corp, Kobe
PEPPER, WHITE—70 bgs, Hismoco American Co, Singapore
PETROLEUM, CRUDE— 343,776 bbls, Wilshire Oil Co, Bandar Mashur
122,924 bbls, Richfield Oil Co, Bandar Mashur
301,267 bbls, Standard Oil Co, Dumai
POPPYSEED—50 bgs, B C Ireland, Amsterdam
PRUSSIAN BLUE—20 dms, Frank D Davis Co, Rotterdam
SODIUM ALUMINATE—150 bgs, C M C Chemicals Inc, Liverpool
SODIUM BICARBONATE—795 bgs, C M C Chemicals inc, Liverpool
TAPIOCA FLOUR—1,680 bgs, Brown Bros, Bangkok
636 ogs, Bangkok
TRICHLOROETHYLENE—325 dms, C M C Chemicals Inc, Liverpool
TUNG OIL—150 tons, Pacific Vegetable Oil Corp, Buenos Aires
118 tons, Bunge Corp, Buenos Aires
UREA—12,500 bgs, Wilson & Geo Meyer & Co, Heroya
ZINC CYANIDE—75 dms, C M C Chemicals Inc, Middlesbrough
ZINC OXIDE—2,800 bgs, Pigment Chemical Co, London
600 bgs, London
ZINC SULFATE MONOHYDRATE—400 bgs, Chemical Manufacturing Co, Antwerp
ZIRCON SAND—4,040 bgs, Frank Samuel & Co, Brisbane
2,000 bgs, Mattoon & Co, Brisbane

Philadelphia

BONE—1,184 tons, Baugh & Son, Rosario
60 tons, Baugh & Son, Buenos Aires
CALCIUM CARBONATE—1,600 bgs, Antwerp
CALCIUM PHOSPHATE, DIBASIC—2,000 bgs, Antwerp
CASEIN—90 bgs, Manufacturers Trust Co, Buenos Aires
CHESTNUT EXTRACT—800 bgs, Chase Manhattan Bank, Naples
1,000 bgs, Naples
CORN STARCH—400 bgs, Antwerp
CRYOLITE—2,190 tons, Pennsalt Corp, Ivigtut
FUEL OIL—76,000 bbls, Esso Standard Oil Co, Aruba
115,731 bbls, Tampico
GYPSUM, CRUDE—10,964 tons, National Gypsum Co, Halifax
6,256 tons, U S Gypsum Co, Hantsport
MENTHOL—1,500 cs, Vick Chemical Co, Rio de Janeiro
PETROLEUM, CRUDE—129,480 bbls, Socony Mobil Oil Co, Puerto La Cruz
212,994 bbls, Socony Mobil Oil Co, Mina Al Ahmadi
122,595 bbls, Socony Mobil Oil Co, Amuay Bay
113,944 bbls, Atlantic Refining Co, La Salina
135,364 bbls, Atlantic Refining Co, Puerto La Cruz
129,127 bbls, Atlantic Refining Co, Punta de Palmas
295,096 bbls, Gulf Oil Corp, Bachaquero
209,259 bbls, Gulf Oil Corp, Puerto La Cruz
292,583 bbls, Gulf Oil Corp, Mina Al Ahmadi
202,868 bbls, Gulf Oil Corp, Las Piedras
79,069 bbls, Hess Inc, Curacao
272,174 bbls, Texas Oil Co, Puerto La Cruz
QUEBRACHO EXTRACT—3,184 bgs, First National Boston, Buenos Aires
SULFUR, CRUDE—4,244 tons, Dixon Chemical Co, Coatzacoalcos
TAPIOCA FLOUR—1,000 bgs, Brown Bros, Itajai
1,800 bgs, Itajai
TRICHLOROETHYLENE—200 dms, Uddeholm Co, Gothenburg
UREA—500 bgs, Genoa
VANILLA BEANS—34 cs, Tampico
ZINC OXIDE—1,200 bgs, Pigment Chemical Co, London

San Francisco

ALUMINOUS OXIDE, ABRASIVE GRAIN — 164 kgs, W C Auger & Co, Manchester
AMMONIUM BICARBONATE—100 bgs, Mattoon & Co, Amsterdam
AMMONIUM CHLORIDE—240 bgs, C M C Chemicals Inc, Liverpool
ANTIMONY REGULUS—50 cs C Gitlan, Antwerp
BONE—1,292 tons, Stauffer Chemical Co, Buenos Aires
BRONZE POWDER—50 dms, Wedeman & Godknecht, Manchester
CARAWAY SEED—100 bgs, Durkee Foods, Amsterdam
CASEIN—300 bgs, Borden Chemical Co, Buenos Aires
200 bgs, First Spice Co, Rotterdam
1,080 bgs, Pacific National Bank, Sydney
COPPER OXIDE—646 bgs, Revelli Chemical Co, Hamburg
COPRA—500 tons, Cargill Inc, Mauban
450 tons, Cargill Inc, Siain
500 tons, Marwood Co, Legaspi
500 tons, American Trust Co, Sastanas
1,000 tons, Pacific Vegetable Oil Corp, Pangi
1,000 tons, Cargill Inc, Dipolog
1,000 tons, Cargill Inc, Romblon
200 tons, Pacific Vegetable Oil Corp, Legaspi
500 tons, Cargill Inc, Legaspi
500 tons, American Trust Co, Siain
1,000 tons, Cargill Inc, Zamboanga
300 tons, Pacific Vegetable Oil Corp, Bulan
500 tons, American Trust Co, Dumaguete
1,000 tons, Borongan
500 tons, Calbayog
DEGRAS—50 dms, S L Abect Co, Manchester
DEXTRIN—15 bgs, Pacific Glue Co, Amsterdam
FISHMEAL—2,439 bgs, Wilbur Ellis Co, Capetown
GRAPHITE—270 bgs, Pacific Graphite Co, Hong Kong
LIVERMEAL—355 bgs, International Packers Ltd, Buenos Aires
NUTMEG—135 bgs, Barclays Bank, Port of Spain
PEPPER, BLACK—300 bgs, California Commodities Corp, Belem-Para
50 bgs, Mitsui & Co, Belem-Para
50 bgs, Irving Trust Co, Belem-Para
PEPPER, RED—100 bgs, Hismoco American Co, Kobe
PETROLEUM, CRUDE—285,131 bbls, Tidewater Oil Co, Mina Saud
36,601 tons, Standard Oil Co, Sungai Pakning
SODIUM TRICHLOROACETATE — 150 dms, C Browser & Co, Hamburg
TAPIOCA FLOUR—1,120 bgs, Morningstar Paisley Inc, Kohsichang
TEREPHTHALIC ACID DIMETHYL ESTER—10 bgs, Califronia Research Corp, Amsterdam
TRICHLOROETHYLENE—385 dms, C M C Chemicals Inc, Liverpool
UREA—2,500 bgs, Atkins Kroll & Co, Antwerp

CSMA Meeting Plans Told

—*Continued from page 7*

given by Kenneth McFarland. His topic has yet to be announced.

Donald M. King, president of CSMA, will deliver the presidential address at this session. At luncheon he will present the 1959 CSMA Achievement Award to H. W. Hamilton, association secretary. David W. Kendall, special counsel to President Eisenhower, will be the luncheon speaker.

Award winning aerosol packages will be on display during the meeting and for the first time the waxes and floor finishes division will sponsor an exhibit of floor coverings and floor care products.

SYNPRO STEARATES

ZINC STEARATE USP, COSMETIC, TECH.
ALUMINUM STEARATE (All Types)
CALCIUM STEARATE BARIUM STEARATE
MAGNESIUM STEARATE USP, TGA Specs.
CADMIUM STEARATE and others

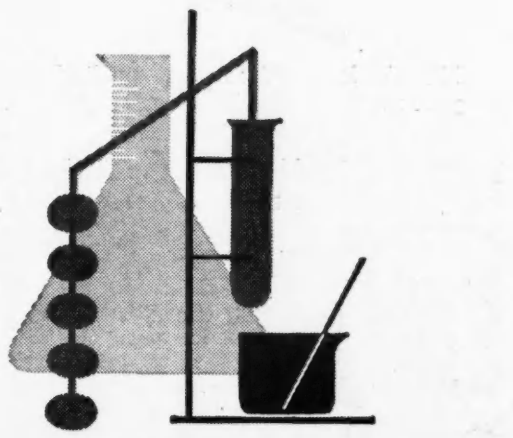
30,000 lb. lots available for single shipments . . . Also producers of laurates, palmitates, and others

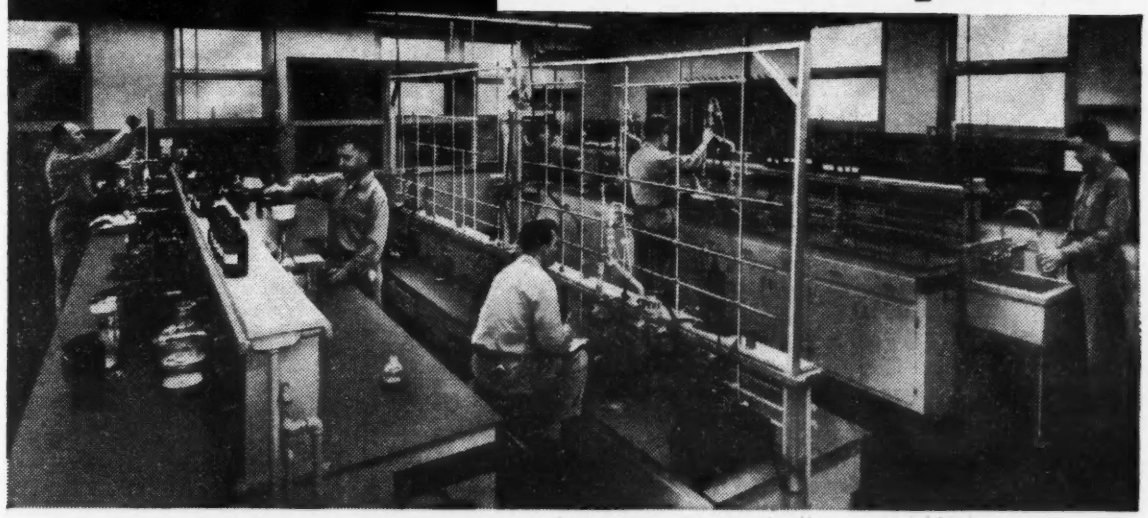
SYNPRON stabilizers for Vinyl Compounds

SYNTHETIC PRODUCTS COMPANY
1636 Wayside Road — Since 1917 — Cleveland 12, Ohio
Phone: KE-1 6010

Get it First . . . . . .
Get it All . . . . . .
Get it Straight . . . . . .
. . . . . in OPD

Mantrose Shellac Research Headquarters





Where the world's finest natural shellacs are "custom-tailored" to industry's special requirements

Good shellac only *begins* with the top-grade seed lac that Mantrose imports. For users today require "individualized" shellacs, modified to fit exacting processing or finishing conditions.

That is why America's leading shellac users call on Mantrose research facilities to "design" *new* shellacs . . . *to build* additional advantages and controlled, predictable processing characteristics into the natural product . . . to enhance still further the unduplicated superiority of genuine shellac.

Chemists and consultants from the Mantrose Laboratories will be glad to discuss how a standard Mantrose shellac, or a "new" shellac, can better suit *your* processing requirements. There is no charge for this service.

The Mantrose Corporation — *Established 1919* — *Importers • Bleachers • Manufacturers*
99 PARK AVENUE, NEW YORK 16, N. Y. • MU 7-7262 • ATTLEBORO, MASSACHUSETTS

FOR FAST SERVICE ON ULTRAMARINE BLUES*

Deliveries from stock through a nationwide network of agents and warehouses.

A complete range of types.

Technical service facilities to help with any formulation or processing problems.

If you're looking for highest quality Ultramarine Blues, call your nearest United Ultramarine agent . . . or write direct to

UNITED ULTRAMARINE & CHEMICAL COMPANY, INC.

149 Broadway, New York 6, N.Y.

*United Ultramarine & Chemical Co., Inc., has been formed to take over the Ultramarine Blues previously marketed by the Pigments Division of American Cyanamid Company. Product and selling codes remain unchanged.

Uniformity Raw Assortment

PLYMOUTH BRAND METALLIC SOAPS

ALL THE METALLIC

STEARATES

Today's highly competitive markets make it more important than ever to purchase Metallic Stearates from a QUALITY producer.

M. W. PARSONS-PLYMOUTH HAS ADDED VERSATILITY TO ITS FACILITIES AND NOW PRODUCES FATTY ACID ESTERS

With the Same High Quality, Dependability and Uniformity, Long Outstanding with its Stearates.

M. W. PARSONS-PLYMOUTH, Inc.

59 BEEKMAN STREET
NEW YORK, N. Y., U.S.A.

Telephone BEEKMAN 3-3162—3163—3164
Cable Address: PARSONOILS, NEW YORK

DISTRIBUTION POINTS AND AGENTS IN ALL PRINCIPAL CENTERS

Trade Name Chemicals

—Continued from page 41

guard L" has a melting point of 656°C., specific gravity of 5.7, tinctorial strength of 55 to 65 percent, and minimum fineness of 99.5 percent through 325 wet sieving. M&T states that **"Thermoguard L"** is insoluble in common organic solvents; slightly soluble in water; soluble in aqueous hydrochloric acid, potassium hydroxide and tartaric acid.

M&T suggests **"Thermoguard L"** for use in protecting vinyl chloride, polyesters and polyethylene compounds used in the manufacture of films, sheets, textiles, paper and paints and other applications where low tinctorial strength is needed.

M&T's **"Thermoguard H"** is another flame retardant, similar to **"Thermoguard L"** in that it is composed of antimony oxide, but differing in that it has high tinctorial strength.

A very fine white power of high purity, **"Thermoguard H"** has a tinctorial strength of 95 to 100 percent with melting point and specific gravity the same as **"Thermoguard L."** Concerning solubility traits, M&T claims that their product is insoluble in common organic solvents; slightly soluble in water; and soluble in aqueous hydrochloric acid, potassium hydroxide and tartaric acid.

"Thermoguard H" is recommended for use in the same materials as **"Thermoguard L"** and in other applications where high tinctorial strength is desired.

Onyx Oil & Chemical Company, manufactures a flame retarding agent trade named **"Repel-O-Flame SP."** This is a neutral salt having no adverse effects on the hand, strength or color of conventional rayon and cotton fabrics. Furthermore, states Onyx, their product has been approved by the New York City Board of Standards and Appeals.

Onyx specifies that **"Repel-O-Flame SP"** is durable to dry cleaning but not to wet washing. The company also recommends that a dried material be passed through a 10 to 20 percent solution of the flame retarder and dried by the usual methods.

Using other finishes with **"Repel-O-Flame SP"** special effects can be obtained. For example by using a combination of **"Repel-O-Tex 10M"** with **"Repel-O-Flame SP,"** non durable water and fire retardancy is the result. It is necessary, however, to adjust the pH with acetic or formic acid to insure compatibility.

Surface Active Agents

The **"Centrols"** are soybean lecithin products put out by Central Soya Company, Inc., are described as having a bland taste and neutral odor and a specific gravity of 1.04 to 1.06. Central Soya states that the **"Centrols"** are readily soluble in animal, vegetable and mineral oils and most solvents, with acetone and alcohols the exceptions. The company admits that these products are only slowly dispersible in water but this can be hastened by using small amounts of alcohol or milk alkaline solutions.

According to Central Soya, the **"Centrols"** are natural emulsifiers and wetting agents and are said to be hetro-ionic in nature, thus making them desirable for use in applications where a neutral, almost non-reactive emulsifier is needed.

Central Soya states that the **"Control"** types of lecithin are good surfactants, but they are not always in the best form to give the most efficient results. As stated above, it is hard to wet the **"Centrols"** with water, and the company further states that the lipophilic and hydrophilic groupings are not balanced to give the most efficient results as an emulsifying agent.

Thus, Central Soya developed the **"Centrolenes."** Whereas in the **"Control"** lecithins the lipophilic groups are emphasized, in the **"Centrolene"** products the hydrophilic groups are more evenly balanced with the lipophilic groups. This characteristic, claims Central Soya, has increased the ability of the **"Centrolenes"** to absorb and retain moisture and have enhanced their capabilities as oil-in-water type emulsifiers.

The **"Centrolenes"** may either be plastic or fluid type emulsifiers. They do not seem to be as sensitive to acid coagulation as the **"Centrols,"** but they form emulsions at a lower pH.

American Lecithin Company, Inc., has on the market soybean lecitin products suitable for use in foods and for industrial purposes trade named **"Alcolecs."** They are said to comprise the naturally occurring phosphatides in association with a carrier of fatty oil as produced from the flaked soybeans with hexane and by concentration and refinement.

One of this line, **"Alcolec S.,** is said to be a powerful surfactant, used specifically for dispersing and wetting out. According to American Lecithin, **"Alcolec S"** and related products are soluble in most fat solvents, other than acetone and ethyl acetate, in mineral oil and in hot fatty oils; but only partially soluble in lower alcohols and their esters.

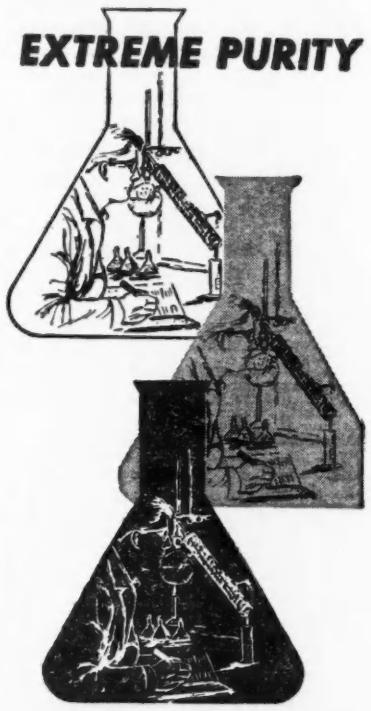
"Alcolec S" is used in many industries for many applications. It can be used to impart greater tinting strength; to prevent sagging and curtaining in long oil alkyd enamels and to provide a bodying effect in flat wall paints; it has been successfully used in chlorinated rubber-base paints and latex and resin emulsion paints; and recently it has found application in organosols and plastisols. American Lecithin claims that **"Alcolec S"** reduces settling in many cases and prevents the formation of a hard deposit.

Philadelphia Drug Exchange Chooses New Officer Slate

Philadelphia Drug Exchange has elected a new slate of officers, headed by Carl K. Raiser of Smith Kline & French Laboratories (see picture story on page 54).

John G. Bill, president of Merck Sharp & Dohme, has been elected vice-president of the exchange. Edward T. McKenna, sales manager of Shoemaker & Busch, Inc., has been renamed treasurer, while J. Mervin Rosenberger has been re-elected secretary.

EXTREME PURITY



DELHI-TAYLOR TRIPLE-TESTED AROMATICS

Delhi nitration grade Benzene and Toluene and Delhi Xylenes have set a new standard in purity and uniformity. They are sulfur and thiophene-free with remarkably low paraffin content.

Delhi-Taylor keeps a careful watch over product purity through its unique "Triple-Testing" procedure.

The first test is made on-stream where rigid process control standards are maintained; the second test is made in storage to make certain that the product maintains its high quality during storage; the final test sample is taken from the barge or tank car before it is released to the customer.

This strict quality control formula is your assurance that Delhi-Taylor aromatics will readily meet the most stringent specifications.

DELHI TAYLOR

CHEMICAL DIVISION

DELHI-TAYLOR OIL CORP.

415 Madison Ave. • New York 17, N.Y.

Petroleum Derivatives

Despite the favorable rate of return to production in the steel industry, the adverse effects of the steel shutdown has yet to be overcome. This is particularly true in relation to the aromatics. The producion of cokeoven benzene probably will not hit its pre-strike pace until well into next year. Until then, the tight supply position existing in the benzene market will continue to be a problem. Xylene's long supply position is largely the result of the exhausted steel inventories of metal fabricators. The backed-up xylene will find an outlet only as the fabricators steel needs are filled.

The aliphatic solvents are routine in demand and prices are firm. Hexane demand for vegetable oil solvent extraction is good due to the stimulus of a near record crop of beans and seeds. Heptane and rubber solvent demand suffer from the cutbacks in automobile production. Mineral spirits and cleaners naphtha are steady in volume of sales and the price patterns in effect over previous weeks remain unchanged.

According to reports from the Bureau of Mines, the amount of domestic crude that will be consumed or exported in December, 1959, is estimated at 7,250,000 barrels daily, compared with 6,900,000 barrels forecast for last month.

An increase in runs forecast for December is necessary to provide for a total demand for distillate of 3,240,000 barrels per day even if distillate stocks are reduced 35 million barrels during the month.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Nov. 21, 1958
103.04	103.04	103.04	104.54

For Current Prices see page 10

Aromatics

Benzene—The outlook in this market is still overshadowed by the shaky steel situation. The adverse effects of the strike are still being felt and it should be the end of January before the production of cokeoven benzene will be brought up to a high level.

At about the time this freeing up of supplies should begin to take place, the gloomy prospect of a new steel walkout becomes a possibility due to the lapsing of the Taft-Hartley injunction. That should bring events around full cycle with a return to tight supplies and high spot prices. Meanwhile, everyone hopes for a settlement.

There is no change in the price picture. Benzene under contract still moves at 31 cents a gallon, with spot benzene holding at the 36-to-40-cents-a-gallon bracket in the Southwest.

Xylene—There is little comfort for producers of xylene in the fast comeback staged last week by the country's steel mills. They feel that it will be four to six weeks before steel mill shipping rates are up to pre-strike levels. Meanwhile, metal fabricators are being forced to close down as their inventories become depleted. The result has been a sharp decrease in normal solvent demand and a corresponding increase in xylene stocks. Prices are firm.

Toluene—A few weeks ago there was a report that Government commitments had caused some regional shortages. This situation has been cleared up and the toluene supply picture is now tending toward the long side. The price pattern in effect over the last few weeks remains in effect.

Aliphatic Solvents

Cleaners Naphtha—The situation in this market is routine due to the end of the seasonal increase of dry cleaning. Supplies are plentiful with no change expected. Prices in effect over recent months remain unchanged.

Hexane—With a near record crop of beans and seeds reported, the demand for hexane is very well sustained. The vegetable oil solvent extraction operations continues to take its share of the market. Diluent uses have declined due to the curtailment of industrial lacquer finishing. Prices are firm and unchanged.

Mineral Spirits—Sales of regular and odorless mineral spirits are firm. Demand for regular mineral spirits and for stoddard solvent continues to take its normal share of the market. The slump caused by the steel situation that has affected the other solvent consumers adversely, did not result in any decline in the solvents used in brush applications.

LPG's

Butane—The October 16-31 period of this year saw a LP output of 94,023,000 gallons plus a refinery output of 16,199,000 gallonz, according to the American Petroleum Institute. One year ago production stood at 76,428,000 and 25,230,000 gallons respectively for the last half of October.

But.-Propane Mix—The last half of October saw an increase in the production of this LP gas. Output for October 16-31, 1958 was 162,702,000 gallons, compared to the 1959 production of 184,610,000 gallons. LR output was 2,408,000 gallons for 1958 and 5,671,000 gallons for the same period this year, according to the API.

Propane—Total light pressed propane gas output from October 16-31 was reported by the API as amounting to 184,610,000 gallons, while light refinery propane gas totaled 67,313,000 gallons. For the corresponding period in 1958 the tally was 162,702,000 and 64,503,000 gallons, respectively.

Waxes

Microcrystalline—There is no change from the previous weeks in the market conditions affecting the light colored microcrystallines. Food packaging demand, despite a slight seasonal dip is well sustained. Prices are holding at their previous levels with no change expected.

Miscellaneous

The Bureau of Mines reports that industry operations for the week ended November 6, 1959 indicate an increase in crude-oil production and an increase in crude runs. According to the API, the daily average output of crude (including lease condensate) was 6,899,000 barrels, an increase of 12,000 barrels from the preceding week. Daily average crude runs to stills of 7,681,000 barrels were 190,000 barrels above the preceding week, and 5,000 barrels below the week ended November 7, 1958. Runs of foreign crude amounted to 967,000 barrels daily, compared with 975,000 barrels in the preceding week. For the four-week period ending November 6, crude oil production averaged 6,875,000 barrels daily, and crude runs to stills averaged 7,648,000 barrels daily with runs of foreign crude averaging 991,000 barrels daily.

The API estimates that the daily average production of crude oil and lease condensate for the week ended November 6 was 6,898,975 barrels.

Reports received from refining companies indicate that the industry as a whole ran to stills on a Bureau of Mines basis approximately 7,681,000 barrels of crude oil daily and produced 27,575,000 barrels of gasoline; 2,267,000 of kerosene; 12,083,000 of distillate fuel oil and 6,086,000 of residual fuel oil during the week; and had in storage 175,800,000 barrels of finished and unfinished gasoline; 32,764,000 of kerosene; 181,624,000 of distillate fuel oil and 57,799,000 of residual fuel oil on November 6, 1959.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended November 7 totaled 254,039,000 barrels, according to data reported by the Bureau of Mines. Compared with the total of 256,299,000 barrels the preceding week, this represents a decrease of 908,000 barrels comprising an increase of 2,326,000 barrels in stocks of domestic crude and a decrease of 1,352,000 barrels in stocks of foreign crude.

$5½ MILLION INSTALLATION
CHEMICAL
MANUFACTURING AND STORAGE
PLANT
AUCTION

formerly operated by
AMERICAN CYANAMID CORP.
Surplus to the needs of the
U. S. Government

TUES. & WED.
DEC. 8th & 9th
10:30 a.m. each day
on the premises
11th St. & Irwindale Ave.
AZUSA, CALIF.
18 mi. E. of Los Angeles
San Bernardino Freeway to Azusa Ave. Exit North, North on Azusa Ave. to 11th St. West to Irwindale & Plant.

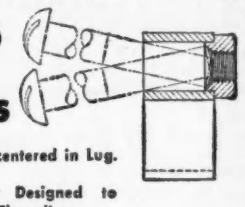
Over 250 Lead Lined, Cork Insulated, Hi Pressure Steel Tanks, 4 Ammonia Compressors. 12 Hooker Evaporators, Screw Conveyors & Agitators, Condensers, Hoists, Pumps, Transformers, Fuels & Water Lines, Electrical Systems, Pipe of All Sizes, Porcelain Valves, Brine Towers, Fume Disposal System, Bolted timber bldgs. to be moved. Rowan & Crouse & Hinds Controls, Porcelain Gate Valves, etc.

All will be sold piece-meal or in lots to suit bidders present.

send for free illustrated folder
MAX ROUSE and Sons
361 S. Robertson Blvd. OL. 5-9300
Beverly Hills, Cal. AUCTIONEERS

LATEST DEVELOPMENT
IN
BOLTED TYPE RINGS

WELD
NUT
RINGS



Nut perfectly centered in Lug.

Nut Specially Designed to Prevent Cross Threading.

Ideal for Power Driven Bolts.

Weld Nut Rings are the greatest time-savers in drum closures. The rings are quickly put in position with a Drum Parts Closing Tool. The bolt instantly threads into the nut—it couldn't do otherwise. (Note the tapered hole construction of the nut.) The bolt can be driven home by hand or a power tool. The result—a quick, easy, safe closure. Furthermore the welded nut prevents lug distortion—still greater safety.

Write for new Catalog showing the Weld Nut and other Rings.

DRUM PARTS, INC.
10311 MEECH AVE. • CLEVELAND 5, OHIO

PARAFFIN
and
MICROCRYSTALLINE
WAXES

SHELL OIL COMPANY
50 WEST 50TH STREET, NEW YORK 20, NEW YORK
100 BUSH STREET, SAN FRANCISCO 6, CALIFORNIA

SHELL

FATTY ACIDS

STEARIC ACID • OLEIC ACID
HYDROGENATED FATTY ACIDS
TALLOW FATTY ACIDS
HYDROGENATED GLYCERIDES
HYDROXY STEARIC ACID
HYDROGENATED CASTOR OIL
12 HYDROXY STEARIC ACID

HARCHEM
CENTURY BRAND
HARCHEM DIVISION
WALLACE & TIERNAN, INC.
25 MAIN STREET, BELLEVILLE 9, NEW JERSEY
IN CANADA: W. C. HARDESTY CO. OF CANADA, LTD., TORONTO

OLEIC ACID
STEARIC ACID
HYDROGENATED
TALLOW FATTY ACIDS

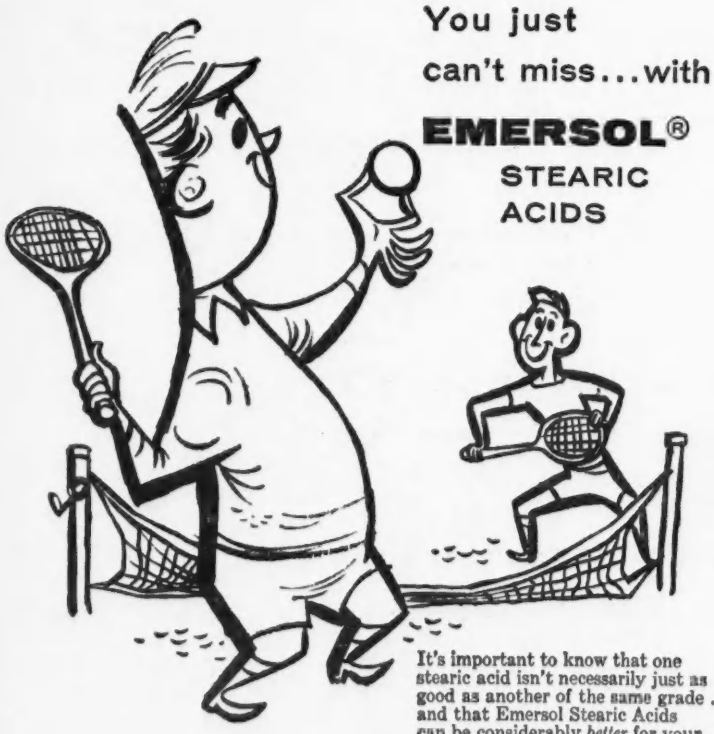
ACME HARDESTY CO
60 East 42nd Street
New York City 17, N. Y.
MUrray Hill 2-8566
Factory: Philadelphia, Pa.

DISTILLED VEGETABLE F.A.
DISTILLED TALLOW F.A.
HYDROGENATED TALLOW
GLYCERIDES.

WAXES

M. ARGÜESO & CO. INC.
441 Waverly Ave., Mamaroneck, N.Y.
Owens 8-8500 • Cable: MARGUESO • Established 1908

Importers and Refiners
CARNAUBA • OURICURY
CANDELILLA
Crude • Refined • Bleached • Flaked • Powdered
MAMARONECK REFINED BRAND
Vegetable Waxes
CERESINS — OZOKERITES
Palm Waxes — Resin Blends
Compounds and blends made to your specifications
CERITA WAXES



You just can't miss...with
EMERSOL® STEARIC ACIDS

It's important to know that one stearic acid isn't necessarily just as good as another of the same grade . . . and that Emersol Stearic Acids can be considerably *better* for your company's products—without costing a cent more.

So, order from Emery the next time you buy stearic acid. Write Dept. O for 24-page Emeryfacts titled "Emersol Stearic Acids."

Emery
FATTY ACID SALES DEPT.
New York • Philadelphia • Boston
Chicago • Cleveland
Ecclestone Chemical Co., Detroit
West Coast: Vopcolene Division
5568 E. 61st Street, Los Angeles 22, Calif.
In Canada: Emery Industries (Canada) Ltd.
639 Nelson St., London, Ontario
Warehouse stocks also in Baltimore and Buffalo
Export Dept.: Carew Tower, Cincinnati 2, Ohio

Emery Industries, Inc.,
Carew Tower, Cincinnati 2, Ohio

Oils, Fats and Waxes

Crude coconut oil was weaker and declined sharply—¾ cent per pound on the Pacific coast and New York markets last week. Trading was reported spotty at the lower levels. Copra also was weaker, off $10 per ton. Cottonseed and soybean oils for prompt delivery were unsteady and off ⅛ cent reflecting the lower future markets which were under liquidation and hedging sales. Peanut oil was the firmest of edible oils, due to scarcity of supplies advanced 1 cent per pound. Corn and cottonseed foots were easier, declining fractionally. Cheaper Spanish olive oil for replacement unsettled the local market and spot stocks were sold at a reduction of 5 cents per gallon.

Trading in tallow and greases was light and spotty. Export interest was reported slightly better. Prices were unchanged and fairly steady.

Among industrial oils, the firmest was imported castor oil, reflecting the higher cost of Indian oil for shipment and scarcity of offers from Brazil. Linseed oil was unchanged despite the sharp decline of flaxseed. Tung oil was quiet, but steady for prompt shipment.

The outlook for food fats and oils in 1959-60 marketing year is dominated by the record large supplies in prospect, according to the Department of Agriculture. Both domestic and export demand will continue strong. Prices of the major food fats—excluding butter— are likely to average somewhat lower than in the past year mainly because of larger production.

Fortunately, the export outlook is favorable. Current indications are that exports of edible fats, oils, and oilseeds (including oil equivalent of soybeans) through September, 1960, may total about 3.6 billion pounds compared with the record 3.3 billion pounds shipped abroad in 1958-59. Soybean exports in 1959-60 are expected to set a new record of about 125 million bushels compared with 110 million bushels last year. Exports of cottonseed oil and soybean oil are expected to equal or exceed the 1.3 billion pounds shipped abroad in 1958-59. Exports of edible oils under government programs probably will be down whereas dollar shipments will be greater than last year. Lard exports during 1959-60 are forecast at 750 million pounds compared with 605 million last year. Cottonseed oil exports during 1959-60 are expected to rise nearly 60 percent above the 404 million pounds shipped last year. Both sales for dollars, mainly to northwestern Europe, as well as shipments under P.L. 480 would share in the rise.

Price Trends

Advanced

Cottonseed meal, $1 per ton.
Corn oil, crude, ¼c. per lb.
Refd., ¼c. per lb.
Peanut oil, crude, 1c. per lb.
Refd., 1c. per lb.
Soybean meal, 50c. per ton.

Reduced

Candelilla wax, crude, 5c. per lb.
Carnauba wax, No. 3, crude Ceara, 1c. per lb.
No. 3 Parnahyba, crude, 2c. per lb.
Yellow, 1c. per lb.
Cocoa butter, 2c. per lb.
Cocount oil, crude, ¾c. per lb.
Copra, $10 per ton.
Corn foots, 95%, ½c. per lb.
Cottonseed foots, 95%, ¼c. per lb.
Cottonseed oil, crude, ½c. per lb.
Refd., ½c. per lb.
Lard, cash, ¾c. per lb.
Olive oil, spot, 5c. per gal.
Ouricury wax, crude, 2c. per lb.
Refd., 2c. per lb.
Soybean meal, $1 per ton.
Soybean oil, crude, ¼c. per lb.
Refd., ¼c. per lb.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Nov. 21, 1958
122.53	122.58	119.95	113.14

For Current Prices see page 10

Vegetable Oils

Castor—Trading in imported oil was quite active. Market was strong, reflecting the higher cost of replacements from India and scarcity of offerings from Brazil. No. 1 Brazilian was sold and firmly held at 17½c. per pound, tankcars, New York, prompt delivery. Domestic grades also were steady and in fair demand.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds	
	Castor Beans	Castor Oil
Last week	.....	2,822,000
Previous week	.....	.....
Corresponding week, 1958	1,779,450	.....
Total this year	24,349,000	85,520,000
Corresponding period, 1958	14,988,900	65,367,000

Coconut—Crude was easier and off ¾c. on the Pacific coast and New York. Trading was spotty at the decline. Market dropped to 16½c. per pound, tankcars, f.o.b. Pacific coast November and December shipment. At New York, prices declined to 18½c., tankcars, all positions, following sales at ¼c. higher.

Corn—Buying interest was limited to actual needs. Crude was firmer and sold at 11¼c. per pound, tankcars, f.o.b. mills, prompt shipment. Refined oil was higher at 14.98c., tankcars, New York basis.

Cottonseed—Trend of the futures market continued downward on the New York Produce Exchange last week. Liquidation and hedging sales weakened the market and caused prices to reach new seasonal lows. Lower soybean oil and allied markets were the dominant factors in lowering market. Cash markets also were easy and lower. Refined salad oil declined to 12¼c. per pound, tankcars, New York basis and was shadable on a firm bid. Morocco was reported to have purchased 2,600 metric tons of bleachable cottonseed oil for late December shipment.

Crude cottonseed oil was unsettled and slightly lower. Sales in the Valley hit the low for the season and took place at 9c. per pound, tankcars, f.o.b., mills, Memphis. In the southeast the market was nominal at 9⅛c. to 9¼c. as to location. In Texas, 8¾c. was bid at Lubbock and 9c. asked, Waco.

Linseed — Market was quiet and unchanged, despite the sharp break in flaxseed. Withdrawals of oil against contracts slackened and reported as fair. Raw oil was quoted at 14½c. per pound, tankcars, Minneapolis, November-January shipment; 14.7c., February-April; 14.9c., May-July, same basis and 16c., exwarehouse, New York.

Flaxseed—Moderate pickup occurred in cash flaxseed purchases ahead of 20c. decline to $3.65 a bushel, spot and to-arrive, basis Minneapolis. Business ground to a halt after the lower price became effective. Futures, too, were down sharply. Winnipeg market drifted lower on lack of export and speculative interest.

The third government estimate of Canadian flaxseed placed the crop at 21,277,000 bushels compared with 21,479,000 bushels, the second estimate and final 1958 production of 22,766,000 bushels.

Oiticica—This market held steady at unchanged prices. Tankcars were held at 20½c. per pound, New York, prompt delivery. Drums were unchanged from 22c. to 22½c., spot as to quantity.

Olive—Trading was spotty. Spanish oil was lower, with sales reported at $51 per 100 kilos, used drums f.o.b. shipping port for prompt shipment. New crop oil was quoted at $48 to $49, same basis for January-February shipment. As a result of prevailing low prices, rumors were current that the Spanish government planned to place export tax on shipments. Greek oil for shipment was indicated at $56 to $57 per 100 kilos, used drums, c. and f. New York and Tunisian oil at the same level in new drums. The spot market was easier with trading in Spanish oil at $2.30 to $2.40 per gallon, drums, duty paid, depending upon quality and quantity.

Palm—Demand was confined to actual needs. Drums were unchanged at 14½c. to 15½c. per pound, spot, depending upon quantity and 11.70c., tankcars.

Peanut—Firmer tone featured this market. Stocks were light. Crude was sold

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, November 20, follow:

	Sales	High	Low	Close
		Cents per Pound		
Dec.	140	11.05	10.88	10.86@10.91
March	176	11.33	11.12	11.13@11.15
May	246	11.48	11.28	11.30@11.32
July	274	11.57	11.37	11.38@11.40
Sept.	20	11.27	11.20	11.18@11.20
Oct.	21	11.18	11.06	11.11@11.12
Dec. (1960)	6	11.22	11.12	11.00 Bid
Mar. (1961)	1	11.15	11.15	11.03@11.15

Total sales and switches, 834 contracts.

Oils, Fats and Waxes

up to 14½c. per pound, tankcars, f.o.b. mills, prompt shipment. Refined oil was advanced to 17¾c., tankcars, New York, prompt delivery. The government last week released peanuts to make only 6 tankcars of oil.

The total supply of farmers' stock peanuts during the 1959-60 marketing year that began August 1, 1959 is placed at about 2,150 million pounds, nearly the same as last year but otherwise the largest since 1950. The 45 percent increase in carryover stocks on August 1, 1959 over a year earlier about offset the 10 percent drop in peanut production. Nevertheless, the 1959 crop is well above probable food and farm uses, and CCC will acquire the surplus under the support program. CCC last season acquired about one-fifth of the record 1958 peanut crop.

Rapeseed—Trading was light and spotty. Tankcars were offered at 13c. per pound, New York, prompt delivery. Drums ranged from 15c. to 15½c., spot as to quantity.

Soybean—Crude for nearby delivery was easier and slightly lower, while January forward was unchanged and steady. Tankcars were lower at 7.85c. asked, Decatur, unrestricted for November-December, while January-February was ⅛c. higher. Refined salad declined to 9.90c., tankcars, New York, nearby delivery.

Tung—Demand was reported light, but the market remained on a steady basis. Imported oil was quoted at 22½c. per pound, tankcars, New York for nearby delivery and 22¼c., December-January. Drums were unchanged at 24c. to 25c., spot, as to quantity.

Another two-year supply of tung oil is in sight for domestic requirements at current consumption levels as the industry enters the new marketing year, according to the Department of Agriculture. As a consequence, tung oil prices (southern mills) to producers in the 1959-60 marketing year will average near the support level of 20.9c. per pound, the same as last year. The department estimated the 1959 tung oil crop, which is beginning to move to the market in volume at around 40 million pounds compared with 1958 record of 45 million. The first official estimate of the crop will be released December 16.

Domestic use of tung oil in the new marketing year is forecast at 45 million pounds, the same as 1958-59 season's level.

Miscellaneous

Cocoa Butter—Market was weak, declining 2c. per pound. Trading was spotty. Prices ranged from 63c. to 68c., per pound, spot, as to quantity.

Copra—With trading slow, offers were more liberal and lower. Sales were reported at $222.50 per ton, c.i.f. Pacific Coast, December arrival. November off $10 and nominal at $225 per ton, same basis.

Fats and Greases

Greases—Trading was spotty, chiefly for prompt needs. Yellow grease was steady, with sales on the basis of 5⅛c. to 5⅜c. per pound, tankcars, delivered, according to quantity. Choice white was maintained at 6⅝c. to 6¾c., same basis.

Lard—Market was weak and declined fractionally. Cash lard was lower at 7⅞c. per pound, drums, Chicago.

Purchase of 3,930,000 pounds of lard was announced November 12 by the Department of Agriculture. The lard will be distributed domestically to needy persons and eligible institutions. Prices paid ranged from 10.92c. to 11.39c. per pound for 2,400,000 pounds of 1-pound and 2-pound carton lard, and from 13.16c. to 13.30c. per pound for 1,530,000 pounds of 3-pound tin lard at the cost of approximately $474,000. Delivery will be during the period of Dec. 14, 1959, through Jan. 16, 1960. The department also announced that it is discontinuing acceptance of additional offers for lard until further notice.

Total purchases during the buying program amounted to 32,571,000 pounds at a cost of approximately $3,850,000.

Tallow—Export interest improved somewhat, while domestic demand was dull. Bleachable fancy was quoted at 6½c. per pound, tankcars, delivered, with best bids ⅛c. lower. Prime was offered at 6¼c. against bids of ⅛c. less. Special ranged from 5⅝c. to 5¾c. and No. 1, 5¼c. to 5⅜c., same basis. Edible tallow was held at 8¾c. to 8⅞c., same basis. Trading in guaranteed fancy was quiet and market was nominal at 8¼c., drums, f.a.s. due to scarcity of containers.

Cake and Meal

Cottonseed Meal—Trading was quiet. Market was firmer. Meal 41 percent was raised to $66.50 to $67 per ton, sacked, Memphis. In the southeast prices ranged from $67.50 to $69 per ton, depending upon location.

Linseed Meal—Slight easing was apparent in this market, influenced by lack of buying interest and rapidly approaching close of water navigation. Crusher quotes were about unchanged and there were no supplies pressing, but scattered re-sale offerings were $1 less. Withdrawals against old contracts were at a slower pace. Extracted meal, 34 percent, was quoted $73 per ton, Minneapolis for November-December shipment and $75 for January-March. Old process expeller meal, 32 percent, was nominally $2 higher at $78.50.

Soybean Meal—Market was irregular but closed 50c. higher. Production increased as several crushers switched from flaxseed to soybean operations, principally in the Northwest. Meal, 44 percent was sold at $59 a ton, unrestricted, bulk, Decatur, for prompt shipment.

Waxes, Vegetable

Feature of the vegetable wax market was the sharp advance of crude candelilla, due to the difficulty of getting supplies from the interior of Mexico to shipping points because of heavy rains which have made roads impassable. This brought out increased demand for limited stocks on spot and sales were reported made up to 53c. per pound. Refined grade has not been advanced as yet. Increased buying interest for carnauba stiffened the local market and sellers advanced No. 3 Ceara and Parnahyba crude 1c. to 2c. per pound. Yellow also was firmer and No. 1 Ceara was raised to $1.15 to $1.16 per pound, spot and Parnahyba to $1.16 to $1.18, depending upon quantity and seller. Ouricury was easier, declining 2c. per pound on spot. Crude was quoted at 68c. to 70c. and refined 75c. to 77c., spot, depending upon quantity.

Obituaries

William Cornell

William Cornell, personnel manager of Schering Corporation's Union, N. J., plant died November 12 in Bloomfield, N. J. He was forty-two years old.

Mr. Cornell had been associated with Schering since 1948. A direct descendent of Ezra Cornell, founder of Cornell University, he was the only life member of that university's board of trustees.

Truman P. Handy

Truman P. Handy, former board chairman and chief executive officer of Celluloid Corporation, and an officer of Celanese Corporation of America, New York, died November 18 in Old Lyme, Conn. He was sixty-nine years old.

Mr. Handy joined Celanese in 1929, became head of its yarn sales, and in 1939 was named the head of Celluloid Corporation, then a Celanese subsidiary.

When Celluloid was merged with the parent company in 1941, Mr. Handy became a vice-president of the Celanese Plastics Corporation subsidiary. At his retirement in 1945 he held that post and that of assistant secretary of the parent concern.

John T. Prescott, newly-appointed director of personnel administration for Raytheon Company, Boston, Mass., died November 18 in Boston. He was forty years old. Mr. Prescott joined the Raytheon staff two weeks ago (November 9) after serving with Olin Mathieson Chemical Corporation, New York.

Victor H. Scales, former director of the American Petroleum Institute's public relations department, died November 17 in Pelham Manor, N. Y. He was sixty-four years old.

Charles Wilson, Nobel prize-winning physicist, died November 15 in Edinburgh, Scotland. He was ninety years old.

HYDROFOL
Fatty Acids
For improved white baking alkyds, soaps, cosmetics, and metal working lubricants.
Quality Checked by Gas Chromatograph
WRITE FOR DATA
Archer-Daniels-Midland
CHEMICAL PRODUCTS DIVISION
723 Investors Building Minneapolis 2, Minn.

PRICE QUALITY SERVICE
Edible Coconut Oil 76°
Hydrogenated Coconut Oil 92° and 110°
Crude Manila Coconut Oil
WELCH HOLME & CLARK CO., INC.
One Hudson St., N. Y. 13, N. Y.
BA 7-4465

CARNAUBA WAX
Refined—Flaked
Specializing in Yellows & Bleached
Candelilla Esparto
Japan Wax Beeswax
WM. DIEHL & CO.
116 East 56th St., N.Y.C. 22, N.Y.
MUrray Hill 8-7960

AMERICAN MONTAN WAX
ALPCO
CONSIDER THAT
ALPCO WAX . . .
✓ is guaranteed to be uniform
✓ is free from import restrictions
✓ is price stabilized
✓ is stocked at convenient points
✓ is offered with technical advice
REFINED GRADES (decolorized) NOW AVAILABLE
Produced in California by:
AMERICAN LIGNITE PRODUCTS COMPANY, INC.
IONE, CALIFORNIA
Sales Offices: 110 E. 42nd St.—RM 1211—New York City 17 & Ione, Calif.

OPD REPRINTS
35 CENTS A COPY
Phthalocyanine Pigments • Sodium Sulfate • Optical Brighteners • Acetone • Maleic Anhydride • Lysine Monohydrochloride • DDT • Ultraviolet Absorbers • DOP and DIOP • Butadiene • Styrene • Borax • Chelating Agents • Titanium Pigment
OIL, PAINT AND DRUG REPORTER
REPRINT DEPARTMENT, 30 CHURCH STREET NEW YORK 7, N. Y.

For Domestic and Export
COTTONSEED MEAL AND CAKE
PEANUT MEAL-SOYABEAN MEAL
Export Codes: ABC 5th, BENTLEY'S JUNIOR PEERLESS
Cable Address: BRODE
Phones: L. D. 271 – Local 38-2544
Teletype No. ME-260
THE BRODE CORPORATION
P. O. Box 700 1012 Falls Building
MEMPHIS, TENNESSEE

BRILL FOR VALUES

REMOVAL SALE
PRICES SLASHED 20 TO 50%

Your opportunity to take advantage of tremendous price reductions before our move to 35-65 Jabez Street, Newark, N. J.

SPECIALS

11—Rotary Dryers: 8' x 87', 7' x 80', 7' x 55', 6' x 60', 6' x 50', 4' x 40', 4' x 30', 34" x 30'.

2—Allis Chalmers 8' x 100' Rotary Kilns.

2—Louisville 8' x 50' S.S. Rotary Dryers.

1—Louisville 4'6" x 40' Aluminum Rotary Steam Tube Dryer.

2—Link Belt 6'4" x 24' S.S. Roto Louvre Dryers.

1—Oliver 6' dia. Horizontal Filter, 316 S.S.

1—Sharples C-27 Super-D-Hydrator 316 S.S.

1—Niagara #370-38 Filter, 370 sq. ft., 304 S.S.

1—Nash H10 Hytor Vacuum Pump, 1500 cfm.

5—Raymond Whizzer Air Separators: 18', 14', 5', 30".

1—Buflovak Monel Evaporator: 550 sq. ft.

3—Struthers Wells 2000 gals. 316 S.S. jacketed, agitated Reactors.

1—Pfaudler 1000 gal. glass lined Reactor.

1—#5 Mikro Atomizer, S.S.

3—Raymond #5057 low side Mills.

3—Swenson Walker Crystallizers 30' long.

1—Stokes R4 Preform Press.

2—#49 Vallez Rotating Pressure Filters, 738 sq. ft.

1—National 8' x 80', 304 S.S. Apron Conveyor Dryer.

1—Louisville 54" x 35', Monel Rotary Steam Tube Dryer.

REACTORS — EVAPS — CONDS — TANKS

1—1400 gal. Blaw-Knox steel jktd. agtd. Reactor.

1—7500 gal. 316 S.S. Vert. Storage Tank 7' x 25', 50 psi.

1—750 gal. nickel clad Mixing Tank, 125# internal with nickel coils.

1—4000 gal. Haveg Vertical Tank 8' x 12'.

1—12,000 gal. horiz. steel Tank 7'6" x 36', 200 psi.

8—Stainless Heat Exchangers: 1220, 942, 536, 396, 315, 250, 157 sq. ft.

1—24" dia. x 35', 304 S.S. Bubble Cap Column.

1—30" dia. x 20', 304 S.S. Bubble Cap Column.

CENTRIFUGES

1—Bird 18" x 28", 316 S.S. Solid Bowl, Cont.

1—Bird 18" x 28", steel, Solid Bowl, NEW.

1—Bird 36" x 50" 347 S.S. Solid Bowl Continuous Centrifuge.

2—Sharples PY14, PN14, Super-D-Canters, 316 S.S.

1—Sharples H2 Nozzlejector, 15 HP, 304 S.S.

1—Bird 40" suspended, 347 S.S., perf. basket.

2—Sharples #16, 304 S.S., 3 HP motor.

FILTERS

1—Oliver 3' x 6' Steel Rotary Vac. Precoat Filter.

1—Oliver 5'3" x 8' Steel Rot. Vac. vapor-tite housing.

1—Sparkler 33S28 Filter 150 sq. ft., 304 S.S.

1—Niagara 36H110 horiz. Filter 110 sq. ft. 304 S.S.

2—#10 Sweetland, 27 leaves, 4" centers, 250 sq. ft.

DRYERS

3—Buflovak Vac. shelf, 20—60" x 80" shelves.

1—Devine Vac. Shelf, 19—59" x 78" shelves.

1—Devine Vac. Shelf, 10—40" x 43" shelves.

2—Devine 5' x 12', 4' x 9' Atmospheric Single Drum.

1—Buflovak 3' x 20' Rotary Vacuum, 316 S.S. Unused.

2—Louisville Rotary Steam Tube, 6' x 25', 6' x 50'.

1—Traylor 30" x 18' S.S. Rotary Dryer.

MIXERS

1—#12 Sturtevant 304 S.S. Rotary Mixer, 450 cu. ft.

1—Baker Perkins #16TRM 150 gal. jktd. sigma blades, Vacuum, 60 HP.

5—Day "Cincinnatus" double arm, 250 & 100 gal.

2—1500# Powder Mixers, 7-½ HP XP motors.

3—Steel jktd. Powder Mixers; 225, 350 cu ft.

MISCELLANEOUS

8—Stokes DD2, DDS2, T, "R", RD-3, "F" Tablet Presses.

2—Robinson Sifters, 40" x 84", Stainless.

3—Robinson Gyratory Sifters 30" x 104", triple deck.

25—Chlorimet, Durimet, and Duriron Centrifugal Pumps 1½" to 6".

Partial List of Values — Send for News Flash!

TEXAS OFFICE: 4101 San Jacinto Street, Houston 4, Texas — Tel.: JAckson 6-1351

BRILL EQUIPMENT COMPANY
2401 Third Ave., New York 51, N.Y. Tel.: CYpress 2-5703

BEST BUY

ROTARY VACUUM FILTERS

4-Oliver 8' x 14' Steel closed drum. Agitated trough

3-Eimco 8' x 14' Steel closed drum. Agitated troughs, vari-speed drive

1-Oliver 8' x 10' Precoat. Steel contact. Vari-speed drive

4-Oliver 4' x 6' Steel closed drum. Agitated troughs

We own these and must move them

PRICED FOR QUICK SALE

MB MACHINERY AND EQUIPMENT CO.
123 Townsend St. • San Francisco 7, Calif.

FEATURED ITEMS

Sharples C27 Super-D-Hydrator S.S.
Fletcher 30" Susp. S.S. 10/5 H.P. Centrif.
Fletcher 40" Susp. Steel Centrif.
Oliver 5'3" x 3' Stainless Precoat Filters.
Nooter 750 gal. Steel Reactor 300 PSI.
Link Belt 502-16 Roto-Louvre Dryer.
Vulcan 9' x 100' Rotary Kiln.
8' x 80' Rotary Dryer 316 SS.
5' x 45' Rotary Dryer.
Mosser 4' x 47' Rotary Dryers.
Louisville 6' x 50' Steam Tube Dryer.
Raymond #5448 High Side Mill.
Micro 2TH Pulverizer.
Condensers-Heat Exchangers 100 to 5000 sq. ft. Stainless Steel, Steel, Admiralty.
Pressure Vessels 300 to 4500 gal.
Towers and Columns 3' to 10' Dia.

WRITE FOR CATALOGUES

HEAT & POWER CO., Inc.
PROCESS EQUIPMENT DIVISION
60 EAST 42nd STREET, NEW YORK 17, N. Y.
310 THOMPSON BLDG., TULSA 3, OKLA.

2—OLIVER PRESS. PRECOAT FILTERS, 5'3" x 3'—Type 316 S.S.

4—RIBBON BLENDERS, 2500 gallons, Roller bearings, stuffing boxes.

3—SIFTERS—READCO, 36" x 78".

1—AUTOCLAVE, 50 gal. S.S. 2000 lb. press.

1—REACTOR, S.S. 1200 gal.

1—AT&M 24" S.S. Solid Basket.

Machinecraft Corporation
800 WILSON AVE., NEWARK 5, N.J.
MI 2-7634

EQUIPONOMICS

HOMOGENIZER — Manton Gaulin, S.S Model 500E, 500 GPH, 5000 PSI.
OLIVER VACUUM FILTER—S.S. 316. 3' x 6' Complete. (1954).
CENTRIFUGES—Tolhurst 26" Monel, Susp;
FILTER PRESS—Shriver 36" x 36"—34-1½" Rubber Covered Frames.
HARDINGE Conical Ball Mill, 4½' x 16".
SIFTERS—Rotex 2 deck, 40" x 60"; 5 deck, 40" x 120"; 20" x 48", 2 Deck.
EVAPORATOR—Single effect, S.S. VRC, 250 sq. ft., Blaw Knox 1953. Complete.
BLENDERS—400#, 1250#, 3000#.
KETTLE—S.S. jack. 900 gal. ASME 125 PSI.
HEAT EXCHANGER—S.S. 500 sq. ft., single pass.
3 H.P. S.S. HOMO MIXER XP.

PROCESS PLANTS SERVICE, INC.
287 Central Ave., Clark, N. J.-Tel. FUlton 1-1103-4

CHEMICAL EQUIPMENT *(Bargains for Quick Sale)*

16—1020 Gals. Baker-Perkins Mixing Tumblers, Teflon Lined, direct Motoreducer Drives
8—1500 Gal. Vert. Jacketed Agitator Tanks, 75# Jacket press; with Motoreducer Drives
1—400 Gallon Struthers-Wells Reactor, S.S.
1—50 Gallon Pfaudler Reactor, Glass lined, Jacket 75# press
1—50 Gallon Pfaudler Open Glass Lined Jacketed Tank, 75# press.
1—Denver Thickener, Stainless Steel.
1—Dorr Oliver Filter, Stainless Steel.
1—Vogt Chiller
1—Proctor Schwartz Shelf Dryer, S.S. trays
1—2,600,000 BTU/H Heat Exchanger, all-steel New 1957.
1—Aero Turn Dust Collector.
1—#20 Charlotte Colloid Mill.
1—48"x34' Accumulator Tank—1300# Press., A.S.M.E.
1—Selas Gas Furnace (Ammonia Superheater).
1—300 Gal. Baker-Perkins Double-Arm Shredder.

ALSO:—Stainless Steel Column, Stainless Tanks, 5 H.P. American Crusher, NEW Stainless Jacketed Valves and welding fittings, Stainless Steel Pumps, Stainless Condenser, Ammonia Compressor and many other items.

Call: Mr. Hunt
JOSEPH ROSENTHAL'S SONS, INC.
1843 N. Second Street, Phila. 22, Pa. • REgent 9-2816

LIQUIDATION
TITANIUM DIOXIDE PLANT
BALTIMORE, MD.

CENT. - FILTERS - EVAPS. - CRYSTAL

1—Bird 32" x 50" Cont. Cent. 316 S.S.
4—Sharples C20 Super-D-Hydrators, 316 S.S.
1—Sharples PN14 Super-D-Canters, 316 S.S.
1—AT&M 26" susp. Cent., perf. bskt. 316 S.S.
1—Oliver 8' x 8' Precoat rubber covered Rotary Vacuum Filters.
3—Sperry 36" plate & frame Filters, rubber covered, and wood.
5—8' dia. x 24' rubber lined Crystallizers.

PULVERIZERS AND MILLS

2—Abbe 5' x 16' brick lined Mills.
2—30" dia. Stainless Steel Micronizers complete with Hoppers, Conveyors, etc.

STEEL TANKS

4—2000 to 5200 gal. with Turbo Agitators.
15—Storage Tanks: 3800; 6000; 9000; 10,000; 15,000; 47,000 gals.

KILNS AND DRYERS

1—Traylor 11' x 155' Rotary Kiln, ⅞" shell.
1—Renn 6' x 60' Rotary Kiln, ⅝" shell.

RUBBER LINED TANKS

5—8500 gal. Vertical Storage 8' 6" x 16' x 8' cone.
1—13000 gal. Horizontal Storage 8' x 35'.

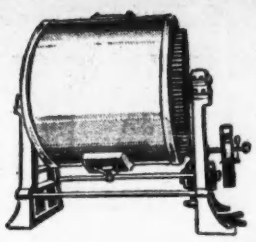
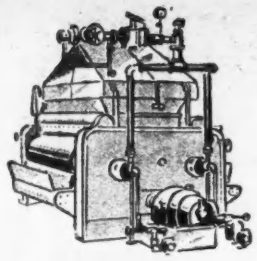
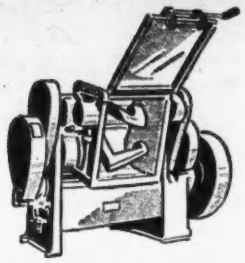
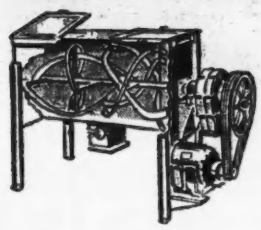
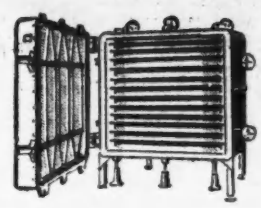
MISCELLANEOUS

7—Dorr Thickeners: 16' dia. with Tanks.
1—Bemis 50# Bag Packer with Sewing Machine, Conveyor and Flattener.
58—LaBour, Durco, Worthite, Duriron and Stainless Steel Centrifugal Pumps 2" to 6" with motors.

PARTIAL LIST OF VALUES • SEND FOR CIRCULAR

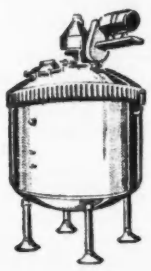
Representatives on Premises, 2701 Broening Highway, Baltimore, Md.
Telephone: Medford 3-2911

BRILL EQUIPMENT COMPANY
2401 Third Avenue, New York 51, N. Y.
Telephone: CYpress 2-5703

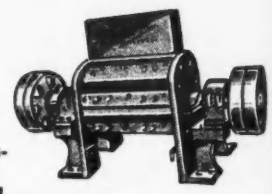






YOU OWE IT TO YOUR COMPANY TO SEE BOTH NEW YORK EXPOSITIONS

The CHEM-SHOW and FMC's PERMANENT EXHIBIT of NEW and REBUILT PROCESSING EQUIPMENT



Make your trip doubly worth while by inspecting First Machinery's HUGE STOCK of desirable chemical and processing equipment. Much more to see and every machine is available IMMEDIATELY. Only 20 minutes by Subway from the Coliseum to FMC Headquarters.



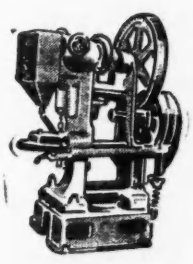
F-B NEW Rubber or Plastic Mills 14"x30".

Baker Perkins Heavy Duty Mixers to 300 Gal.

Stokes and Colton Pre-Form Tablet Presses.

Rubber Stock Cutters-Plastic Granulators.

Ball & Jewell and Abbe Rotary Cutters.



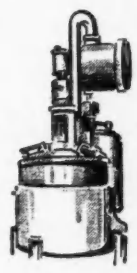
Pfaudler Glass Lined, Jktd. Reactors to 1000 Gal.

Struthers Wells 2000 Gal. Stainless Steel Reactor.

Mojonnier Stainless Vacuum Pans 3'x10'; 6'x12'.

Harris Stainless Coil Heated Vac. Pan; 6' Diameter.

Lancaster Stainless Lined Rot. Jktd. Reactor; 50"x17'4".



Buffalo Cast Lead Evaporators; 5' and 6' Dia. & accessories.

Nickel Clad Reactors; 7'x11'6" Manhole; Jacketed and Agitated.

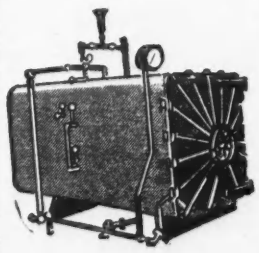
Patterson 1000 Gal. Closed Jktd. Steel Mixing Kettle; 20 HP.

Three Stage Continuous Agitated Reactor; 3 Vessels 4'x20'.

Type 316 Stainless Separator Tanks; 42" x10'; Dished Heads.

A. O. Smith Stainless Lined Pressure Tanks; 10'x18'7"; 11,000 Gal.

Heavy Duty Aluminum Tank; 5000 Gal.; 8'x12'; 30 PSI ASME.



Stainless Steel Vacuum Mixers; Double Arm; 150-500 Gal.

Baker Perkins Jacketed Dbl. Arm Mixers, 100, 150, 200, 300 Gal.

2 Baker Perkins KO-Kneaders Model K 300; Jacketed.

Baker Perkins Hexagonal Jacketed Baratte; 150 Gal. 36"x39".

Blaw Knox Conical Blender; 300 Cu. Ft.; 9'6" Diameter.

FATTY ACID INSTALLATION SYSTEM

Includes Ni-Resist Still Pots, Monel and Steel Tanks, Stainless Heat Exchanger, Condensers, Receivers, BOILER, Jet and Booster Ejectors, Pumps, Filters and accessories. Send for complete details.

A BATTERY OF
A.T.&M. 60"
TYPE 316
STAINLESS CENTRIFUGALS
CENTER SLUNG SUSP.

IN STOCK
BRAND NEW
FALCON MIXERS
DOUBLE RIBBON
STEEL OR STAINLESS
ALL SIZES

SEND FOR NEW FIRST FACTS JUST PRINTED

FMC Pays MORE For Your Surplus

Bird Continuous Conical Hor. Centrifuges; 18", 24", S.S. & Monel.

Sharples H2 Nozzlejector; 15 HP XPL Motor; 1000 GPH.

Sharples Model M 4 P Super Centrifuges in MONEL.

De Laval Type 316 Stainless Hermetic Separator VO-244.

Blaw Knox Stainless Rot. Dryer 54"x30'.

Monel Rotary Dryer 42"x30' with 7½ HP Motor and Accessories.

Stainless Lined Rotary Dryer 50"x20' with Com. Chamber etc.

Stokes Rotary Steam Jacketed Dryer; 18" x8' complete.

Bagley & Sewell Double Drum Dryer; 28" x60" complete.

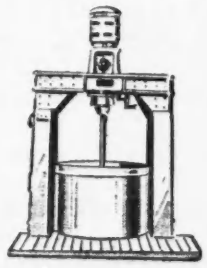
Buflovak Double Drum Dryer 40"x120" with accessories.

Louisville Stainless Rotary Dryer; 30"x28'; Indirect Fired.

American Jacketed Sterilizer; 30"x48"x 84"; Double Door.

2 American Dbl. Wall Lab. Sterilizers; 16" x24"; Gas or Electric.

Pfaudler Stainless Jacketed Evaporating Dishes; 6'x28".



Oliver Continuous Rotary Panel Type Vacuum Filters; 8'x8' and 8'x10'.

Oliver Monel Pre-Coat Cont. Rotary Pressure Filters; 3'x2' complete.

Oliver Dorrco Rotary Vacuum Filter 6'x3' with Nickel contact Parts.

Bird Young Rotary Vac., Filter 4'x4'; Stainless.

Sweetland Pressure Filters No. 2 to 12.

Enzinger Stainless Vert. Pressure Filter 18" x36"; ASME; 24 sq. ft. filter area.

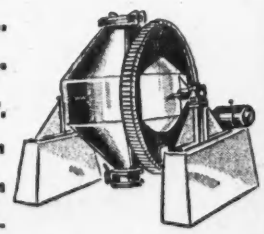
Shriver Aluminum Filter Presses; 7" & 18" & 30", 36".

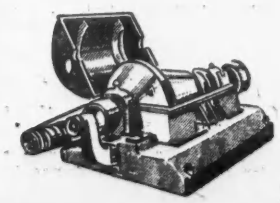
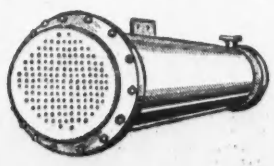
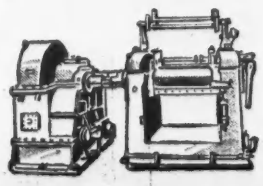
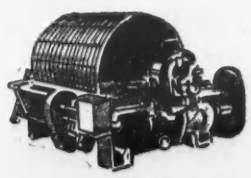
Sperry Stainless Filter Presses in sizes 12", and 18".

Ni-Resist and Nickel Filter Presses in sizes, 10" and 18".

Shriver and Sperry Cast Iron Presses from 12" to 42".

Fletcher 12" Stainless Underdriven Centrifuge.



FIRST MACHINERY CORPORATION

209-289 TENTH STREET, BROOKLYN 15, N. Y. • STerling 8-4672

IMMEDIATE DELIVERY

PHILADELPHIA – OTHER LOCATIONS

1—Patterson 6' x 8', Porox lined pebble mill, with 50 HP gearhead motor-drive, 2" porcelain balls. 1947 mill—like new.

1—1900 sq. ft. T316 SS horiz. heat exchanger, 2-pass, ASME code, 75# WP tubes.

1—2500 gal., T316 SS pressure tank, 70# WP, 7' dia. x 7' high, 1/4" shell & 5/16" dished heads. With Lightnin' 3 HP prop. agitator.

3—Hardinge 8'8" dia. x 70' long rotary dryers, 5/8" shell, complete.

1—6' x 7' x 100' long rotary kiln, 1/2" shell.

2—7'6" x 100' long rotary kilns, 1/2" shell.

1—Kennedy Van Saun 4' x 8' contin. rod or ball mill, 50 HP, end periph. discharge.

1—Kennedy Van Saun 7' x 9' continuous ball mill, 150 HP.

1—J. H. Day 38 cu. ft. jktd. ribbon mixer, T316 SS, 10 HP.

1—Baker Perkins #16-JYEM2, 150 gal. sigma blade jktd. mixer.

70—Baker Perkins #17-V11, 200 gal. sigma blade jktd. mixers.

1—Raymond 50", 5-roller hi-side mill, Dbl. Whizzer separator.

1—Link-Belt #604-18 roto-louvre dryer, 6' x 18'.

5—A.T.&M. 40" T304 SS suspended centrifugals, 40 HP motors.

24—Sharples #AS-16 Super centrifugals, Inconel bowls & covers, 3 HP TEFC motors.

2—Buflovak 42" x 120" double drum dryers, 100# drums.

1—1300 gal. T304 SS jacketed kettle, 5 HP XP agit.

2—4' dia. spray dryers, T304 SS, pilot size, elec. heating.

1—Buflovak 5' dia. x 12' long single drum VACUUM dryer-UNUSED.

1—Oliver 5'3" dia. x 8' face rotary Vacuum filter - UNUSED.

3—10' dia. x 80' long rotary dryers, 3/4" shell.

ONLY A SMALL FRACTION OF OUR TREMENDOUS INVENTORY

SEND FOR CATALOG #859-A
12 PAGE, ILLUSTRATED BOOKLET,
A COMPLETE LIST OF OUR STOCK!

TEXAS PLANT

2—60" dia. Vulcan T316 SS bubble cap columns or scrubbers, 16' high, 10 trays on 12" centers.

1—17,650 gal. T316 SS horiz. tank, 9' dia. x 36' long, 1/4" shell, 3/8" dished heads, 26 sq. ft. int. coil, 70# W.P.

9—2600 gal. T316 SS vert. tanks, 7' dia. x 8' high, dished top, flat bottom, 1/4" shell. (Some with 5 HP paddle agitators & int. coils)—19# W.P.

2—1900 gal. T316 SS vert. tanks, 6' dia. x 8' high, dished heads, - VACUUM—or 100# W.P.

1—Struthers Wells T316 SS evaporator, 630 sq. ft., single effect.

3—Worthington 160 ton steam-jet vacuum refrigeration units.

1—3500 gal. Struthers-Wells T316 SS jacketed reactors, 180 sq. ft. internal coil, paddle agitator & 40/20 HP motor & drive.

1—2,200 gal. Comb. Eng. T316 SS jacketed reactor, VACUUM, paddle agitator.

2—96" dia. Vulcan T316 SS bubble cap columns, 30 trays on 12" centers, 272 caps per tray.

1—110" dia. Vulcan T316 SS bubble cap column, 10 trays on 12" centers, 252 caps per tray.

1—72" dia. Vulcan copper bubble cap column, VACUUM, 40 trays on 12" centers, 150 caps per tray.

1—Dry material handling system, including: 2-Read 1800 cu. ft. T304 SS weigh hoppers; AJAX "Lo-Veyor" shaker conveyors; T304 SS bucket elevators 60' & 41' centers; T304 SS screw conveyor.

4—Struthers-Wells T316 SS Vacuum Crystallizers, 1200 or 560 gal. capacity, dished top, cone bottoms.

75—T316 SS heat exchangers & condensers: 2000 sq. ft. down to 30 sq. ft. - All sizes.

35—Ingersoll-Rand & Durco stainless chemical pumps: 6" x 5" down to 2" x 1-1/2".

3—18,000 gal. Aluminum cone bottom vert. tanks, 12' dia. x 31' OAH.

NEW AND COMPREHENSIVE
ILLUSTRATED CIRCULAR
BEING PREPARED

SEND FOR COPY

PERRY EQUIPMENT CORPORATION

1407 N. SIXTH STREET, PHILADELPHIA 22, PA.

Phone: POplar 3-3505

PERRY EQUIPMENT CORP.

EQUIPMENT
for CHEMICAL AND ALLIED INDUSTRIES

2—Sweco 48" SS separators, Model D-2D-8.

1—Tolhurst center slung 40" rubber covered centrifuge, perforate basket, with motor.

1—Tolhurst SS 20" suspended type centrifuge perforate basket.

1—AT&M SS 18" suspended type centrifuge imperforate basket.

1—AT&M 48" SS suspended type centrifuge imperforate basket.

1—Baker Perkins Size 6, SS, 2¼ gal. double arm jacketed vacuum mixer, complete.

1—Baker Perkins Size 16 Type UUEM, 150 gal. double arm jacketed dispersion mixer with 100 HP motor.

1—Glen 340 qt. mixer.

12—Robinson SS horizontal ribbon blender, 255 cu. ft.

1—Patterson sigma blade SS jacketed vacuum mixer, 500 gal.

1—Sprout Waldron Model 501-D pelleter with SS contact parts.

2—Sturtevant #7 SS dust type rotary batch blenders, NEW.

1—Readco jacketed 1000# ribbon blender.

1—Pfaudler Series R 500 gal. glass lined jacketed reactor, complete with agitator and drive.

1—Pfaudler Series ELL 500 gal. jacketed reactor, complete with agitator and drive.

3—Pfaudler 200 gal. glass lined jacketed reactor with impeller type agitators and drives.

2—3000 gallon stainless steel vertical storage tanks.

4—Stokes Model 138J-20 single door vacuum shelf dryers, 20 shelves.

1—Stokes SS jacketed rotary vacuum dryer, 2'x6'.

1—Buflovak stainless steel jacketed rotary vacuum dryer, 3'x15'.

1—Stokes Model 59DS rotary vacuum dryer, 5'x30'.

2—Louisville stainless steel rotary dryers, 8'x50'.

1—Shriver cast iron P & F 36"x 36" closed delivery 4 eye filter press, 60 chambers.

1—Niagara stainless steel filter, Model 510-28.

1—Sparkler stainless steel filter, Model 14-D-4.

1—Swenson type 316 SS vacuum crystallizer, 3'6"x12'.

1—Swenson type 316 SS vacuum crystallizer, 2'x12'.

15—Davis Engineers heat exchangers, 145 sq. ft., NEW.

2—Badger type 316 SS condensers 500 and 600 sq. ft.

1—Downington SS heat exchanger, 750 sq. ft.

4—Package steam generators, 50, 80, 300 and 500 HP.

1—Process Engineers SS jacketed kettle, 1500 gal, 140# working pressure jacket, 150# working pressure shell.

R. GELB & SONS, INC.
UNION, NEW JERSEY Est. 1886 MUrdock 6-4900

SAVE ON GOOD USED MACHINERY

CENTRIFUGALS—12", 30", 40" & 48".
CENTRIFUGES—Sharples #5 Stainless. Also #6.
DRYERS—Allright Nell 4' x 9' Atmos. Drum Dryer. Also Rotary Dryers. Buffalo Vac Drum Dryer 24" x 20". Devine 8 shelf Vac Dryer 38' x 42".
FILLERS—Powder & Liquid. Also Labelers.
FILTERS—Vallez type 49, with 41 Stainless covered leaves. #2 Sweetland 12 Stainless covered leaves. Ertel 6" & 10" Disc type.
FILTER PRESSES—6" to 36" Iron & Wood.
KETTLES—Stainless Jack. 20 to 500 gals. Dopp 350 gal. Cast Iron Jack. Vacuum. Devine Impreg. Units 30" & 36" dia. Steel, Alum & Copper 5 to 2,000 gals.
MILLS—Raymond #00 Pulverizer 30 HP complete. Also #0000. Mikro Pulverizer #4, 2S1, 2TH, 1SH, Hammer Mills & Pulverizers 3 to 50 HP. Williams #BB, #3 & #2XX Hammer Mills. Ball & Jewell #2 Rotary Cutters. Spr. Wald, Stainless Spike Crusher. Pebble, Jar & Ball Mills, Lab. to 6' x 8'. 3 Roll, 9" x 32", 12" x 30", 16" x 40" Lehmann 4 Roll W C. 12" x 36" Steel
MIXERS—Baker Perkins 100 gal. Jack. Day Imperial 75 & 150 gal. Change Can Mixers 8, 15 & 40. Day Jumbo 700 gal. horiz. Mixer. Blystone 3000# horiz. spiral Mixer. Sturtev. 1 ton Drum Blender 10 HP. Day 1000# horiz. Dry Spiral Mixer. Dry Spiral Mixers 50 to 3000#. Lancaster 6' dia. 25 HP & #1, 3 HP.
PUMPS—Vacuum 10 to 500 CFM. Gould 75 HP Centrifugal 250 PSI.
SIFTERS—Day, Robinson etc.
SOAP MACHINERY—Toilet, Laundry, etc.
TABLET MACHINES—Stokes Rotary BB2, RDS3 & RD3. Single punch to 3".
TANKS—Stainless, GI, Lined, Steel.
MISC.—Boilers Gas & Oil. Conveyors.

Partial Listings — Write for Bulletins

STEIN EQUIP'T. CO.
107 8th St., Brooklyn 15, New York
STerling 8-1944

CASH
FOR YOUR IDLE MACHINERY!
For top prices, quick action, contact us.
Liquidations; appraisals our specialty.
Wire us your list today, or phone GA 1-1380
ME MACHINERY AND EQUIPMENT CO.
123 Townsend St. - San Francisco 7, Calif.

A SELL-OUT BEFORE MOVING

4—Baker Perkins & W & P 200 gal. Jkt'd., sigma blade Shredders—$1650.00 ea.
2—Ball & Jewell #2 Cutters with 75 H.P. motors—$2750.00 ea.
4—Link-Belt Vibrating Screens 4' x 8' — $1050.00 ea.
1—Jeffrey Vibrating Conveyor.
2—30" Sperry Filters, closed del., 3-eye, 39-plates, 40-frames—$1950.00 ea.
1—42" Sperry Filter 40-plates, 41-frames, hyd. closing, open del.—$2500.
9—Blackburn Smith Pressure Leaf Filters with S.S. Leaves.
1—International Ball Mill, porcelain lined, 48" x 60", 15 H.P. Unibroke Motor, 2-drums balls. Like new—$3200.
1—Schutz-O'Neill Pulverizer 22", Style D.
1—Sparkler Filter 18" dia., 7-plates, 316 Stainless-steam jacketed.
1—Sparkler Filter 33-S-28 with Scavenger Plate, steam jacketed, and extra plates.
1—2 qt. Sigma Blade S.S. Mixer.
1—250 gal. Kettle, nickel jacket, 100#.
2—Axial Flow Fans with 7-½ H.P. motors —$750.00 ea.
1—430 S.S. Tank 3000 gal. vert. ¾ plate, with 2 pc. cover.
2—Vacuum Pumps, Gardner-Denver, 5" bore 4" stroke, with 7-½ H.P. motors.
1—#316 S.S. Reactor 265 gal. jkt.
2—Twin Screw Mixers 120 gal. jkt.
1—Air Compressor, Gardner-Denver, 5 x 2-¼ x 4, with 15 H.P. motor.

We have many other items too numerous to mention.
Advise us as to your requirements.

H. LOEB & SON 4643 LANCASTER AVE., PHILADELPHIA 31, PA.

PUMPS—VACUUM—115 CFM Beach Russ RP 100 w/5 HP motor-vee drive-Dorr Oliver 9x8 w/15 HP motor.

AUTOCLAVES—S/S 2 qt.-35 gal. jacketed-100 gal. jack/ag.-150 gal. jack./ag.

PACKAGING MACHINERY—Triangle (6 oz. to 5#)-Triangle auger packer 1# to 5#-St. Regis 105FV-Bag Packer-Pneumatic Scale Auto. Capper.

MILLS—HAMMER—00 Sturtevant 10 HP. X Gruendler 20 HP-3W Mikro 30 HP-24x20 Jeffrey 40 HP-AKBX Wms. 100 HP.

MILLS—PEBBLE—15-½ Gal jar-100 Gal. 34x38-110 Gal. 36x36-120 Gal. 36x42-211 Gal. 4'x5'-597 Gal. 6'x5',-1000 Gal. 6'x8' porcelain lined w/motors.

SCREENS—20" Coombs Gyratory-12"x72" Lo-Veyor (S/S)-20"x84" Rotex triple-40x84 Rotex double-3x5 & 3x10 Tyler double.

LAWLER COMPANY
LAWLER PLACE METUCHEN, N. J.
LIBERTY 9-0245

GREETINGS!
CHEM-SHOW VISITORS

We have the welcome mat out for you. Pay us a visit while you're in town, and look over our fine stock of prime machinery.

5—80 gallon stainless steel agitated autoclaves.
3—Mikro pulverizers, Bantam, 2-TH, 4-TH.
4—Rotex sifters 20" x 48", 40" x 84", 40" x 120", 60" x 120".
1—400 gallon stainless steel jacketed and agitated reactor.
2—Pfaudler glass lined jacketed and agitated reactors 1000 and 500 gallons.
4—Stokes tablet presses models F, T, R, RD-3.

Hundreds of Other Desirable Items

CP chemical & process machinery corp.
52 Ninth St. Brooklyn 15, N.Y. HYacinth 9-7200

Business Wants and Offers

RATES PER INSERTION—PAYABLE IN ADVANCE (Not Subject to Agency Commission)

ALL CLASSIFIED ADVERTISEMENTS—$6.00, thirty-six words or less: $1.00 for each additional six words or fraction.

NO DISPLAY—First two words printed in bold face type.

COPY DEADLINE—Wednesday Noon Preceding Date of Publication.

Send replies to ads with box numbers to
OIL, PAINT AND DRUG REPORTER
30 Church St., New York 7, N. Y.

BUSINESS OPPORTUNITIES

Dry Color Plant Wanted. Established company having National Representation and sales to the Paint, Ink, Plastic, Rubber and other Protective Coatings Industries, wishes to Buy or Acquire an interest in a Pigment Manufacturing Plant or one manufacturing allied Products OPD 868

EQUIPMENT OFFERED

For Sale: 1 Nash Hytor Vacuum Pump Size H-6, Test #Y-2543 20 inch vacuum, Mercury, 4 inch pipe connections. Used very little. Good condition. 1 Forty inch Cresson-Morris Centrifugal, Two speed motor 600-1200 R.P.M. Bottom Discharge. Bronze basket, complete. Giles Chemical Corporation, Waynesville, North Carolina.

EQUIPMENT WANTED

Used 1,000 to 2,000 gallons Heresite or Glass lined storage tank. Equipped with bottom outlet and bolted manhole. GE 5-8227—1247 38th St., B'klyn., N.Y.

Plants Wanted for Dismantling; will buy equipment and machinery. Kapco Equipment Co., 227 Clifford Street, Newark, N.J. MA 3-7627.

PLANTS WANTED

Wanted—Small lacquer plant or suitable building by manufacturer in metropolitan New York area seeking additional facilities elsewhere. OPD 886.

POSITIONS OFFERED

"There is an excellent opportunity for Chemist with experience in sulfonating and processing oils. Reply giving particulars of your experience to OPD 887."

POSITIONS WANTED

International Sales Executive, presently employed, aggressive, competent, creative, valuable connections here and abroad, seeks position with producer or substantial organization serving heavy chemical industry. 15 years thorough diversified sales, management experience. Widely traveled, languages. OPD 884.

Sales Manager: Successful marketing experience in selling of chemicals, metals and heavy equipment. Proven personal selling ability with major accounts. Experienced in developing sales team, controls, new product uses and markets. B. S. Chemical Engineering; MBA-Harvard, age—41, Present salary $18,000. OPD 874.

REPRESENTATION WANTED

Representation for Boxed Carboys—glass and plastic bottles; 5-6½-13-gallon capacity; to cover manufacturers. Areas east of Mississippi. May carry other lines. United Box & Lumber Co., 45 Wheeler Point Rd., Newark, N.J.

SERVICES OFFERED

Custom Grinding Mexico ores including Bentonite, Phosphate, Talc, etc. Will unload, stockpile, grind, warehouse and reload in cars. Write us for further information. Victoria Gin Company, Inc., P.O. Box 67, Brownsville, Texas.

SERVICES WANTED

Wanted: Company to do contract work of color and pigmented lacquers, also water paints and binders for the leather industry. OPD 888.

Hormone Makers

—Continued from page 3

and other effects on small drum manufacturers.

The hearings starting in December are planned to run just over one week and probably will then be recessed until some time in January, after congress has reconvened for the second session. Whether the committee will continue with cortisone at that time or move on to another class of drugs was not explained.

He said, however, that in addition to the three largest producers of cortisone, the committee will hear witnesses representing the Arthritis & Rheumatism Foundation and the American Association of Retired Persons during the first section of the investigation. He said these two organizations had requested an opportunity to testify.

The committee will also hear from independent experts and smaller drug manufacturing companies, including Premo Pharmaceutical Laboratory.

Appearance Dates

The names of the companies and organizations together with their appearance dates are as follows:

December 7 and 8—Francis C. Brown, chairman and president of Schering Corporation; E. D. Brandsome, Dr. Ronald Lamont-Havers, Dr. Russell Cecil and Flyod B. Odlum, also of Schering, and a representative of the Arthritis & Rheumatism Foundation.

December 9 and 10—John T. Connor, president of Merck & Co.

December 11—Dr. Ethel Andrus, president of American Association of Retired Persons and National Retired Teachers Association.

December 14—E. G. Upjohn, president of Upjohn Company.

Bids Wanted

Abrasives, indefinite quantity, paper, cloth, disks, stone, steel wool, ladders and glass, in accord with Fed. Specs. P-C-451A, P-P-105, P-P121A, P-C-458A, SS-S-736 & Amend. 3, FF-W55 6 & Amend. 1, LLL-L-62 & MIL-D-15770C TC. Bid IFB NY-1SL-94432, Dec. 11, General Services Administration, Business Service Center Region 2, 250 Hudson St., N. Y. 13, N. Y.

Compound, coating protective, rubber surfaces, "Willard Tire Co.", 22,000 gals. (in 55-gal. nonreturnable dms.), No. RR124, Bid IFB 60-28B, Dec. 1, Letterkenney Ordnance Depot, Procurement Div., Chamersburg, Pa.

Ether Diethyl, 840,000 lbs., Grade C Jan-E-199 (2), Bid IFB 174-66-60, Dec. 9, Naval Propellant Plant, Indianhead, Md.

Herbicide, polybor or equal., 530-50 lb. bags.; **Ureabor,** or equal., 360-50 bgs., Bid IFB ATA-62552, Nov. 27, General Services Administration Region 4, Business Service Center, 50 Seventh St., N.E., Atlanta, Ga.

Methanol, ACS, 5,640 bots.; **Paraffin,** USP, 1,200 bxs., **Olive Oil,** USP, 1,080 cns.; **Soap Medicinal Soft,** USP, 3,280 dms.; **Sulfuric Acid,** ACS, 3,480 bots.; **Xylene,** ACS, 11,400 bots.; Bid IFB M5-39-60; **Acetone,** ACS, 8,880 **Citric Acid,** USP, 3,600 bots., **Dextrose,** USP, 3,960 bots.; **Hydrochloric Acid,** ACS, 2,064 bots.; Bid IFB M5-39-60, Dec. 1, Marketing Division, for Drugs and Chemicals, VA Supply Depot, Somerville, N. J.

Paint, antifouling, 4,632 gals., Spec. MIL-P-15125A (QPL) Bid IFB 155-1078-60B, Dec. 2, General Stores Supply Office, 700 Robbins Ave., Philadelphia 11, Pa.

Paint & Paint Products, (Enamel, Paint, Turpentine, Varnish) various amounts, 17 items, Bid KC-79123, Dec. 3, General Services Administration, Region 3, Business Service Center 2306 East Bannister Rd., Kansas City 31, Mo.

Potassium Chlorate, 20 tons, 99.8% fine white powder, packed in drms. of 100/110 kgs.; **Technical Gelatine,** 3 tons, match grade, packed in drms. of 1 cwt.; **Manganese Dioxide,** 3 tons, red 70%, packed in 50/60 kgs.; **Ferric Dioxide,** 1 ton, black, match grade, packed in paper bags of 25/26 kgs., Nov. 27, Ibrahim Match Works, 19 Kurbani Ganj, Chittagong, East Pakistan.

Tetrafluorodichloroethane, 690,000 lbs., Bid IFB 151-06-185, Nov. 30, US Atomic Energy Commission, Paducah, Ky.

MACHINECRAFT

Stokes 3 DDS2, 2 DS3
Baker Perkins, 150 and 100 gal. S.S. 2 arm.
40 HP & 50 HP jacketed, vacuum, hydr. tilt.
Blaw-Knox 2 gal S.S. Autoclave 5,000 lb.
Vulcanizer 60" x 9' 125 lbs.
Sweetland #2 all stainless.
Stainless steel Ball Mill.
Aluminum Condenser 350 square feet.
4-24" Filter Press S.S. Fittings Wood Fr.
1-24" Filter Press open delivery.
2 Proctor & Schwartz finned Drum Driers.
Continuous Stripping Column 2 x 13.
Alum Evaporator Calandria type 1,300 sq. ft.
Banbury Mixer Midget.
Ribbon Blenders. Hydraulic Pumps.

Louis Sussman, Inc.
800 Wilson Ave. (East of Doremus)
Newark 5, N.J. MI 2-7634

MACHINERY — ANYONE?

1—Louisville 54" x 35' MONEL Rotary Steam Tube Dryer.
1—Fitzpatrick Model D Comminuting Machine.
1—Colton 2BT single punch Tablet Machine.
1—Robinson 30" x 60" STAINLESS Gryro Sifter.
1—Tolhurst 30" STAINLESS Extractor, m.d.
1—Wolf 200 cu. ft. Ribbon Mixer, m.d. Filter Presses, Dryers, Agitators, Vacuum Pumps, Hammer Mills, etc.

WHAT DO YOU HAVE FOR SALE?

BILL WOLF, Inc.
2708 CAROL ROAD UNION, N.J.
MUrdock 6-8883

WANTED!
CHEMICALS—DYES
PHARMACEUTICALS
SOLVENTS—OILS
INTERMEDIATES
PLASTICIZERS—WAXES
PIGMENTS—COLORS
PACKAGED ITEMS
EQUIPMENT—PLANTS
BY-PRODUCTS

SELL NOW!
TURN INVENTORIES INTO CASH!

Chemical Service Corporation
88 BEAVER ST., NEW YORK 5, N.Y.
Tel: Hanover 2-6978
Cable address "RETORTS" N. Y.
Est. 1925

FOR QUICK SALE
8' x 86' — 12 Unit P&S Type U STAINLESS CONVEYOR DRYER
SS304 contact parts Motors X. P.
Including Auxiliary Conveyors
93" x 92' — .048" Belt 15-45 FPM
24" x 71' — .032" Belt 55 FPM
24" x 30' — .032" Belt 50 RPM
12" x 18' — .024" Belt 20 FPM
86" x 77' — Flight 50 FPM
Individually or as a Complete Unit
Write for Details
HEAT & POWER CO. Inc. 60 E. 42nd St. N.Y. 17, N.Y.

VALUES GALORE— AT OUR OLD & NEW LOCATIONS

1—Stokes DD-2 Rotary Tablet Press.
2—Stokes "F" Single Punch Presses.
1—Stokes "R" Single Punch Presses.
1—Stokes 43A Granulator w/motor.
1—Fletcher 30" Type 316 S.S. Sus. Centrifugal.
1—B.P. 4AN2 Jack. Mixer 1 Gal. w/Exp. Pf. Motor.
2—Vac. Shelf Dryers—Lab. & 6 Shelf.
1—Abbe "O" Rotary Cutter.
1—Simpson Lab. Mixer w/Motor.

Ask for your Copy of Bulletin A-44 listing many desirable items. We buy your surplus or will trade.
THE MACHINERY & EQUIPMENT CO.
91-93 New Jersey R.R. Ave., Newark 5, N.J.
MArket 2-3103

SPECIALS

Pebble Mills: Patterson D 3 x 4' porc.
Disintegraters: Rietz RD18-P, steel, 75 hp.
Mixer: Baker-Perkins size 17, 200 gal.
Percolators: Pfaudler, stainless, 54 x 42"
Mills: Fitzpatrick model D, st., jktd.
Evaporator: Buflovak sgl. eff. st.st. 94 sq. ft.
Dryer: Porter 2 x 4' vac. drum, st. st.
Centrifugal: Tolhurst 26" rubber, 2-speed.
Mix-Mullers: Simpson Lab., Porto, #00.
Dewaterers: Davenport model 3A, 3 hp.
Centrifugal: Tolhurst 20" type 316 st. st.

Write us or call Seeley 8-1431
Send us a list of your idle machines.

LOEB EQUIPMENT SUPPLY CO.
814 W. Superior St. Chicago 22, Ill.

ECH SPECIALS

Abbe 5'x6' J'ktd. Ball Mill, ch. mang. st.
Sturtevant 1 ton #3 Blender, 7' drum.
Rotex 40"x84" Sifter, #42, Db. sep, 1 HP.
Day #4 Gearless 60 gal. Pony Mixer, 10 HP.
Pfaudler 1500 gal. Glass Tank: closed top.
Gruendler "BB" Whirlbeater Hammer Mill, BP Jktd. Mixer, 100 gal. w'k'g, cored arms.
Nash Hytor Vac. Pump, #6, 40 HP motor.
4 Mikro's-Bantam, #1SI, #2SI, #4 w/mtrs.

WE BUY COMPLETE PLANT OR SINGLE UNITS
New machinery div. for new fabrications
Tel. SOuth 8-4451—4452—8782
YOU CAN BANK ON
Equipment Clearing House Inc.
111 33 Street, Brooklyn 32, N. Y.

we will buy your...
SURPLUS CHEMICALS
SOLVENTS • WAXES • OILS
RESINS • DRUGS • COLORS
WIRE OR PHONE FOR IMMEDIATE ACTION
All offers held in strictest confidence
Barclay CHEMICAL COMPANY, INC.
77 VARICK STREET NEW YORK 13, N.Y. WO 6-4533

— WANTED FOR CASH —
Off Spec. Job-Lot Discontinued / SURPLUS Used or Spoiled — Glycols (Any Type) • Plasticizers • Vegetable—Animal Oils Solvents • Chemicals • Raw Materials & Finished Goods
Drum Lots to Tanker Lots . . . Any Quantity
Don't Throw Away Materials Which Are Seemingly Useless . . See Us First ! !
HIGHEST SPOT CASH PRICES PAID
CHEMSOL, INC., • Washington Ave. & Franklin St., New Market, N. J. • FLanders 1-3010 PLymouth 2-1140

BUY ON TERMS!
SPECIALS FROM OUR STOCK OF OVER 10,000

2-Rotex 40" x 84" Double Deck Screen. Complete with Motors
1-Standard Steel 70" dia x 50' Rotary Dryer. Comp. w/Fans & Cyclones
3-Fitzpatrick Model D-5, K-7 and K-3 Comminuting machines. 20 HP
1-Kronz Quad. Effect copper Evaporator Calandria type. 2" tubes. 8000 sq. ft.
1-Louisville 54" x 35' Monel Rot. Steam Tube Dryer. 1100 sq ft area
2-Riley 1000 HP Water Tube Boilers. 200 PSI. Code constr. New 1951
1-Rotary Kiln 6 x 7 x 100' Riveted construction. Hood, Stack Mtr.
2-Raymond #5047 4 Roller Hi-Side Mills. Cyclone, Separator & Collectors

For any item you need, wire or phone collect GA 1-1380
ME MACHINERY AND EQUIPMENT COMPANY
123 Townsend St. San Francisco 7, California

PRODUCTION MANAGER AROMATIC CHEMICALS

Leading organic chemical firm has excellent opportunity for an experienced production chemist to take charge of division responsible for manufacture of fine aromatic chemicals for the perfume and flavor trades. Salary commensurate with ability; excellent employee benefits including retirement plan. Factory located in New Jersey near New York City. Our employees know of this opening. Send detailed resume including salary requirements to OPD 885, Oil, Paint and Drug Reporter, 30 Church Street, New York 7, New York.

Advertisers' Index

Acme Hardesty Co. ... 60
Air Reduction Chemical Co. ... 33
Allied Chemical Corporation, National Aniline Division ... 15
Allied Chemical Corporation—Plastics & Coal Chemicals Division ... 44
Allied Chemical Corporation, Solvay Process Division ... 29
American Cyanamid Company ... 27
American Firstoline Corporation ... 38
American Lignite Products Co. ... 61
Amoco Chemicals Corporation ... 12
Archer-Daniels-Midland Company, Chemical Products Division ... 61
Argueso, M., & Co., Inc. ... 60
Armour Pharmaceutical Company ... 51
Ashcraft-Wilkinson Co. ... 40

Baker, J. T., Chemical Co. ... 1
Barclay Chemical Company, Inc. ... 66
Becco Chemical Division, Food Machinery & Chemical Corp. ... 21, 36, 39
Better Finishes & Coatings, Inc. ... 34
Blockson Chemical Company ... 39
Bonewitz Laboratories, Inc. ... 50
Bower, Henry, Chemical Mfg. Co. ... 38
Bowman, Charles, & Co. ... 50
Brill Equipment Company ... 62
Brode Corporation, The ... 61

Celanese Corporation of America, Chemical Division ... 68
Chemical Manufacturing Co., Inc. ... 35
Chemical & Process Machinery Corp. ... 65
Chemical Service Corp. ... 66
Chemical Solvents, Inc. ... 68
Chemirad Corporation ... 43
Chemsol, Inc. ... 66
Climax Molybdenum Company ... 36
Clintbrook Chemical Company ... 49
Columbia Southern Chemical Corporation ... 34
Commercial Solvents Corporation ... 24
Concord Chemical Company ... 45
Conray Products Co., Division Chemical Service Corp. ... 50
Coupe, Robert A. ... 38
Cowles Chemical Company ... 35

Davies Nitrate Co. Incorporated ... 28
Delhi-Taylor Oil Corp. ... 58
Diehl, Wm., & Co. ... 61
Distillation Products Industries, Div. of Eastman Kodak Company ... 43
Dixon International, Inc. ... 39
Dow Chemical Company, The ... 36, 45
Drum Parts, Inc. ... 59
DuPont de Nemours, E. I., & Co., (Inc.) ... 1
Duval Sulphur & Potash Co. ... 40

Eastman Chemical Products, Inc. ... 55
Emery Industries, Inc. ... 60
Equipment Clearing House, Inc. ... 66

Fairmount Chemical Co., Inc. ... 34
First Machinery Corp. ... 63
Florasynth Laboratories, Inc. ... 53
Freeport Sulphur Company ... 40
Fritzsche Brothers, Inc. ... 53

Gelb, R., & Sons, Inc. ... 65
General Mills, Inc. ... 56
Grace Chemical Company, Division of W. R. Grace & Co. ... 56
Greeff, R. W., & Co. ... 18
Gulf Oil Corporation ... 43

Harchem Division, Wallace & Tiernan, Inc. ... 60
Harshaw Chemical Co., The ... 51
Heat & Power Co., Inc. ... 62, 66
Hercules Powder Company, Incorporated ... 25, 43
Heyden Newport Chemical Corporation ... 55
Hoffmann-La Roche, Inc. ... 8, 49
Hooker Chemical Corporation ... 37
Hutchinson, D. W., & Co., Inc. ... 53

International Petrocolvents, Inc. ... 43

Jefferson Chemical Company, Inc. ... 19, 42, 50

Lawler Company ... 65
Lebanon Chemical Co. ... 40
Lever Brothers Company ... 43
Loeb, H., & Son ... 65
Loeb Equipment Supply Co. ... 66
Lucidol Division, Wallace & Tiernan, Incorporated ... 42

Machinecraft Corp. ... 62
Machinery & Equipment Company ... 62, 65, 66
Machinery & Equipment Co., The ... 66
Magnus, Mabee & Reynard, Inc. ... 53
Mallinckrodt Chemical Works ... 28, 28a
Mantrose Corporation, The ... 57
Mason & Dixon Tank Lines ... 54
Michigan Chemical Corporation ... 17
Millmaster Chemical Corporation ... 68
Minute Maid Corporation, Citrus Products Division ... 52
Mississippi Lime Company ... 35
Montrose Chemical Company ... 18
Mutual Citrus Products Company ... 23

Neville Chemical Company ... 68
Nylos Trading Co., Inc. ... 50
NYQ Chemical Division, S. B. Penick & Company ... 6

Olin Mathieson Chemical Corporation, Chemicals Division ... 41
Oronite Chemical Company ... 46

Parsons-Plymouth, Inc., M. W. ... 58
Penick, S. B., & Company ... 53
Pennsalt Chemicals Corporation, Industrial Division ... 1
Penola Oil Company ... 31
Perry Equipment Corp. ... 64
Petro-Tex Chemical Corporation ... 13
Petroleum Chemicals, Inc. ... 42
Pfaltz & Bauer, Inc. ... 50
Pfizer, Chas., & Co., Inc. ... 48
Phelps Dodge Refining Corporation ... 36
Philipp Brothers Chemicals, Inc. ... 37
Pitt-Consol Chemical Co. ... 46
Plastics and Coal Chemicals Division, Allied Chemical Corporation ... 44
Polak's Frutal Works, Inc. ... 54
Prior Chemical Corporation ... 1
Process Plants Service, Inc. ... 62
Procter & Gamble Co. ... 43
Publicker Industries, Inc. ... 11
Pure Carbonic Co. ... 39

Raney Catalyst Co. ... 42
Read, Chas. L., & Co., Inc. ... 55
Reinhart Chemical Corporation ... 45
Republic Steel Corporation ... 45
Riches-Nelson, Inc. ... 68
Richter, Gedeon Pharmaceutical Products, Inc. ... 50
Robeco Chemicals, Inc. ... 68
Rosenthal's, Joseph, Sons, Inc. ... 62
Ross, F. H., & Co. ... 39
Rouse, Max, & Sons ... 59

Sergeant, E. M., Pulp & Chemical Co., Inc. ... 68
Shell Oil Company ... 59
Smith-Douglass Company, Inc. ... 38
Southern States Containers Division, Reynolds Aluminum Supply Company ... 20
Stauffer Chemical Company ... 39
Stein Equipment Co. ... 65
Sussman, Louis, Inc. ... 66
Synthetic Products Company ... 57

Tennessee Corporation ... 16

Union Carbide Chemicals Company, Division of Union Carbide Corporation ... 1
U. S. Borax & Chemical Corporation ... 1
United States Potash Company Division of U. S. Borax & Chemical Corp. ... 40
United Ultramarine & Chemical Company, Inc. ... 58

van Ameringen-Haebler, Division of International Flavor & Fragrances, Inc. ... 54
Ventura Processors ... 22

Wallerstein Company, Inc. ... 51
Welch, Holme & Clark Company, Inc. ... 61
Western Pennsylvania Chemical Co., Inc. ... 38
Westvaco Chlor-Alkali Division, Food Machinery & Chemical Corporation ... 2
Wolf, Bill, Inc. ... 66
Wyandotte Chemicals Corporation ... 35, 38

OPD's Advertising Staff

PRODUCTION: Claire Shannon
BUYERS DIRECTORY: Helen Lohse
NEW YORK (REctor 2-9820)—Alexander Kane, G. Bronson Philhower, Harry L. Townsend
CLEVELAND (LOng 1-0544)—Henry G. Seed, 17717 Lomond Boulevard, Cleveland 22, Ohio
MIAMI (FRanklin 9-2668)—John Printup & Associates, Langford Building, Miami 32, Fla.
DALLAS (DAvis 1-0898)—John Printup & Associates, 2607 Millmar Drive, Dallas 28, Tex.
LOS ANGELES (DUnkirk 7-4388)—Robert W. Walker Company, 730 South Western Avenue, Los Angeles 5, Calif.
SAN FRANCISCO (SUtter 1-5568)—Robert W. Walker Company, 57 Post Street, San Francisco

Synthetic Organics Steady

—Continued from page 7

cyclic intermediates, and finished synthetic organic chemical products.

The first section includes statistics on tar, tar crudes, and crude chemicals derived from petroleum and natural gas. Total production of coaltar, water-gas tar, and oil-gas tar in 1958 amounted to 698 million gallons— 24 percent less than the 916 million gallons reported for 1957.

Production in 1958 of all tar crudes amounted to 12,866 million pounds, compared with 14,361 million pounds in 1957. The most important individual products included in this group are benzene, toluene, naphthalene, and creosote oil.

Crude Petroleum Output

The output of crude products from petroleum and natural gas in 1958 was 20,903 million pounds, compared with 18,094 million pounds in 1957. Included in this group are benzene, toluent, xylene, and other cyclic products, and aliphatic hydrocarbons such as ethylene, propane, and 1,3-butadiene, the latter being one of the basic raw materials for the manufacture of S-type synthetic rubbers.

Production of cyclic intermediates, which is covered in the second section of the report, amounted to 6,643 million pounds in 1958—a decrease of 4 percent from the 6,927 million pounds produced in 1957. As in earlier years, more than 60 percent of the output of cyclic intermediates was used by the original manufacturers to produce more advanced products. The remainder was sold to other companies for further processing.

Data On Finished Material

The third section of the report deals with finished synthetic organic chemicals and chemical products. The total output of such products amounted to 36,603 million pounds in 1958, compared with 36,309 million pounds, in 1957. Of this total, cyclic finished products accounted for 6,569 million pounds, and acyclic products for 30,034 million pounds.

Of the eleven groups of finished synthetic organic products, five were produced in greater quantities in 1958 than in 1957, and six were produced in smaller quantities.

The groups for which production increased were surface-active agents (12 percent), pesticides and other organic agricultural chemicals (5 percent), plastics and resin materials (4 percent), medicinals (3 percent), and miscellaneous (0.5 percent). Groups for which production declined were rubber-processing chemicals (9 percent), elastomers (6.5 percent), toners and lakes (6 percent), plasticizers (6 percent), flavor and perfume materials (4 percent), and dyes (2 percent).

Price history is a fundamental part of all chemical product considerations.

85.7% of the basic material used in the CHEMICAL PROCESS INDUSTRIES have a history of ***change in price.***

14.3% remained ***stable in price*** from 1952 through 1958 ! ! !

KNOWING WHICH PRICE WENT UP, WHICH DOWN, AND HOW MUCH THE CHANGE, AS WELL AS WHICH PRICES REMAINED THE SAME, IS

TREMENDOUSLY IMPORTANT INFORMATION

. . . in Chemicals Buying
. . . in Chemicals Selling
. . . in Chemical Product Formulations
. . . in Chemical Business Management

So, each year in February, every subscriber to

OIL, PAINT AND DRUG REPORTER

receives a newly brought-up-to-date history of Chemical Prices . . .

1960
HI-LO CHEMICAL PRICE ISSUE
Oil, Paint and Drug Reporter
FEBRUARY 24, 1960
An 8-Year Study of the price behavior of the basic quantities of more than 2600 process materials, compiled by years from the weekly quotations of Oil, Paint and Drug Reporter

DATA FOR THE ADVERTISING DEPARTMENT

Next HI-LO Chemical Price Issue:
FEBRUARY 24, 1959

Single Purpose:
Price histories, consideration of which is always a first step in volume chemicals buying. Executives reach for this highly specialized publication when the chemicals buying processes are at their start.

Who for:
All who must consider chemicals costs . . .
All who must study proposed contractural relationships . . .
All who must have price histories as starting point for projecting estimates of:
a) Future new or old product developments
b) New or expanded plant facilities
c) Make or buy advantages

Closing Date:
DECEMBER 1, 1959

Send your Order and Copy to:
Oil, Paint and Drug Reporter, 30 Church St., New York 7, N.Y.

Numbers to call for further information:
New York, REctor 2-9820 . . . Cleveland, LOng 1-0544 . . .Dallas, DAvis 1-0898 . . . Los Angeles, DUnkirk 7-4388 . . . Miami, FR 9-3668 . . . San Francisco, SUtter 1-5568

ADVERTISEMENTS IN THE "HI-LO" PUT PRODUCTS AND SERVICES ON THE SCENE AT THE THINK STAGE

COPPER SULFATE • NICKEL SULFATE

(PHELPS DODGE REFINING CORP.)

SAL AMMONIAC SOLID BRICKS

ROBECO CHEMICALS, INC.

25 EAST 26th ST., NEW YORK 10, N. Y.

CABLE ADDRESS "RODRUG" N. Y. ALL CODES

MUrray Hill 3-7500

CHLORINATED SOLVENTS

Ethylene Dichloride • Propylene Dichloride •
Methylene Chloride • Carbon Tetrachloride •
Trichlorethylene • Perchlorethylene • 111 Trichloroethane

GLYCOL ETHERS • ALIPHATIC NAPHTHAS • AMINES
ESTERS • AROMATIC SOLVENTS • PLASTICIZERS
CHLORINATED SOLVENTS
KETONES • GLYCOLS
ALCOHOLS

MArket 2-3680 (N.J.)
WOrth 2-7763 (N.Y.)

CS CHEMICAL SOLVENTS, INC.

60 PARK PLACE, NEWARK 2, N. J.

Petroleum Resins

NEVILLE CHEMICAL COMPANY • Pittsburgh 25, Pa.

Manufacturers of Hydrocarbon Resins, Oils and Solvents

NEVILLE

DISODIUM PHOSPHATE

MONOSODIUM PHOSPHATE

SODIUM HEXAMETAPHOSPHATE

SODIUM TRIPOLYPHOSPHATE

TETRASODIUM PYROPHOSPHATE

SODIUM METASILICATE, ANHYD.

TRISODIUM PHOSPHATE

RN

MURRAY HILL 7-7267
RICNELCHEM, N. Y.

RICHES-NELSON, INC.

Chemicals and Allied Products

342 MADISON AVENUE, NEW YORK 17, N. Y.

European Affiliate

RICHES-NELSON, S. P. R. L., 72, Ave. Brillat-Savarin, BRUXELLES, BELGIUM

CASEIN

Prime Quality 30 Mesh Lactic

E. M. SERGEANT
PULP & CHEMICAL CO., INC.
7 DEY STREET · NEW YORK 7, N.Y.
Established 1867

Cuprous Chloride

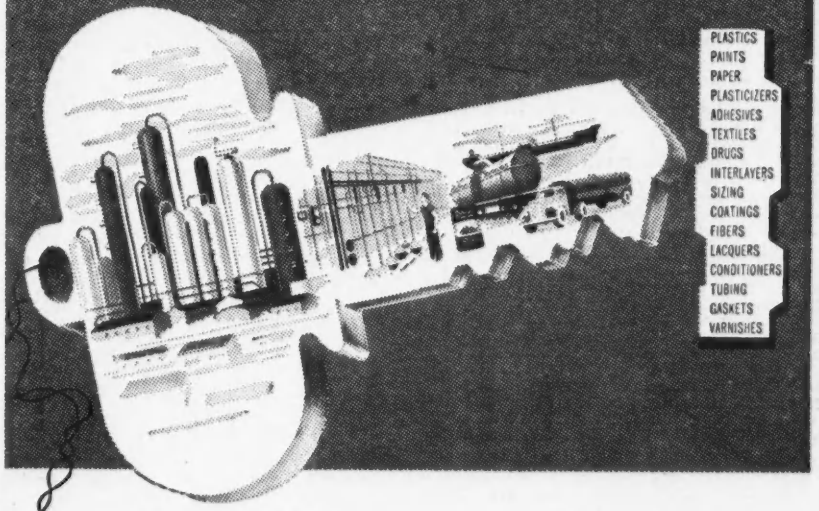
Calcium Acetate, purified

Potassium Persulfate

Ferrous Oxalate

Millmaster
Chemical Corporation
99 PARK AVENUE, NEW YORK 16, NEW YORK • MU 7-2757

CELANESE VINYL ACETATE MONOMER



INTEGRATED PRODUCTION is your key to dependability

We make the raw materials for vinyl acetate and combine these materials to form the monomer. We exercise control of all the processes basic to the finished product. Result: you benefit when you buy high-quality $CH_3CO_2CH{:}CH_2$ monomer from the Celanese Corporation of America. With a reliable monomeric product as a start, you can be confident of achieving the best possible results. You can polymerize Celanese vinyl acetate, make copolymers with it, use it as an intermediate to prepare pharmaceuticals and fine organic compounds. Write for technical data on this dependable monomer today.

Celanese Corporation of America, Chemical Division, 180 Madison Ave., N.Y. 16.

Celanese

Canadian Affiliate: Canadian Chemical Company Limited, Montreal, Toronto, Vancouver.
Export Sales: Amcel Co., Inc., and Pan Amcel Co., Inc., 180 Madison Avenue, N. Y. 16.

Celanese CHEMICALS